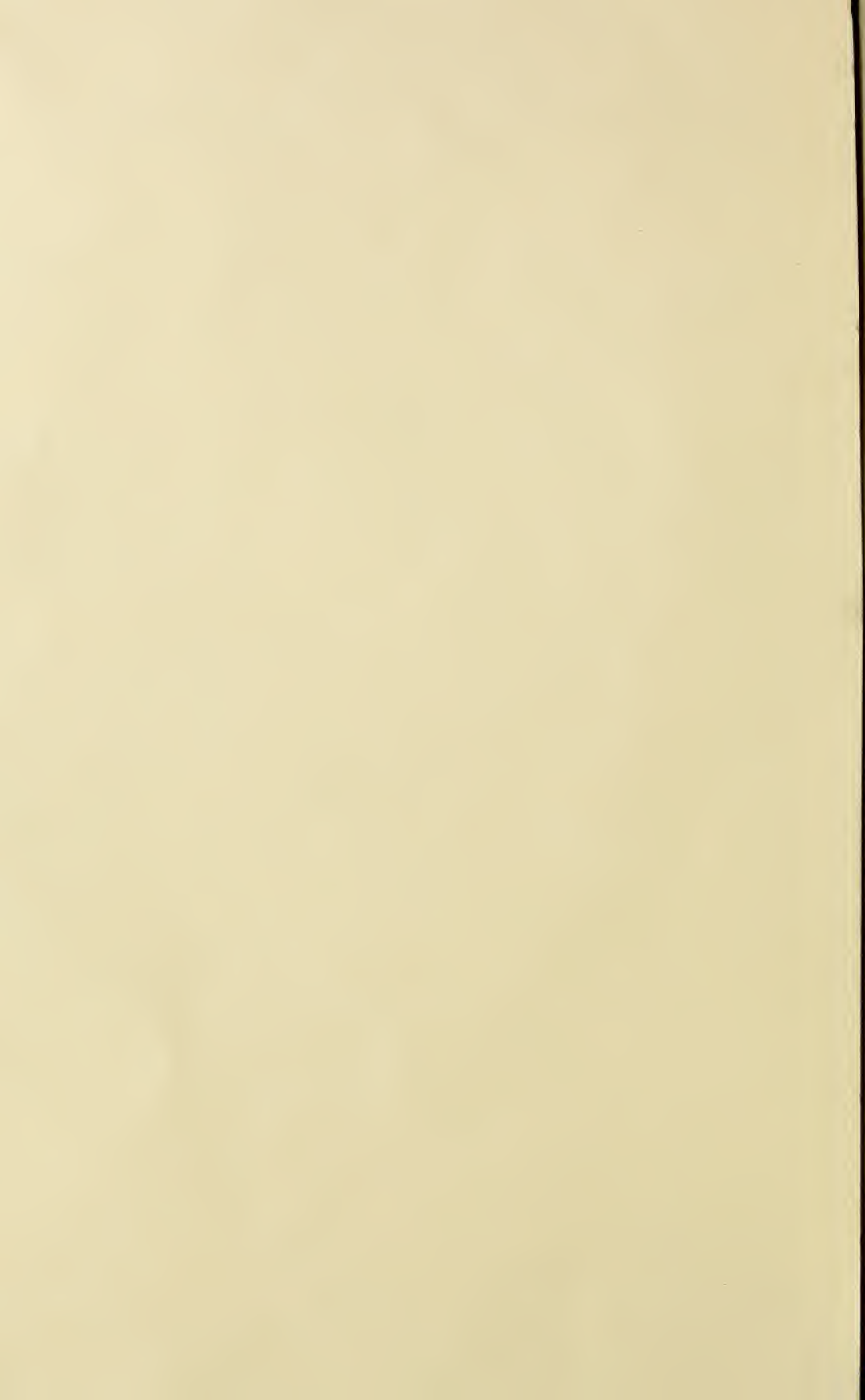


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# THE MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

VOL. 9.

BALTIMORE, APRIL, 1872.

No. 4.

## PLANTS—THEIR FOOD AND GROWTH— GREEN MANURING.

In the March number of the *Farmer* we indicated the relations and close identity of the constituents of plants with those of the human body. We drew thence an inference as to the food required in the soil for the proper growth both of the vegetable and the cereal crop. We closed with a few words as to the value of fertilizers, now so extensively used to supplement a deficiency of barn-yard manure. We also spoke of the adulteration of fertilizers, and the prudence of buying only of dealers of the highest standing.

We intend in treating further of this subject to show in the present article the importance of green crops turned under, as a fertilizing agent. It is a point we have frequently urged before, but which cannot be too often pressed on the attention of the farmer.

It is not only the deprivation of the soil of its phosphates and potash, by a succession of exhausting crops of tobacco, wheat, corn, and the cereals generally, that has rendered the soils of Maryland less fertile than they were originally. These exhausting crops have seriously affected the absorbent powers of the soil, which grew gradually weaker as its fertilizing constituents—its humus, potash, phosphates, lime, &c.,—were taken from it. Moreover, much of our soil, especially that of the lower counties on both shores of the Bay, is of the lighter kind, and when the land is undulating, summer droughts and washing rains alike combine to deprive it of its remaining elemental plant food, and to cut up the hill-sides into gullies and ravines. It was to avoid these consequences that experienced farmers have resorted to the system of alternate cropping, in which the cereals are followed by clover and the finer grasses. This is more necessary with us than in Europe, as we cultivate so much of our land in hoed crops, and consequently leave it

bare to the burning action of the summer sun. In Europe, owing to the general moisture of the climate—especially in Germany and Great Britain—the trouble of the farmer is not too much sun, but too much water. In this country our trouble is the very reverse. We have too much sun, and the evaporation of the rain fall goes on too rapidly. In Europe they have to resort to underdraining to lay their land dry, and to promote warmth in the soil. Here we want shade crops, to protect the soil from the intense heat, and too keep it moist and cool. It is for these reasons that green crops with us should invariably follow cereal crops, and the best of all crops for turning under is a heavy clover crop, inasmuch by a happy law of nature it contains in its ashes all the constituents that enter into a crop of wheat, and strange to say, nearly in the same relative proportions.

We do not undertake, however, the fertilizing value of the finer grasses. These are also advisable in their way, and by retaining possession of the soil for several years in succession, and by the fact that many of them are pastured, contain a vast amount of nourishment for future crops when turned under. When not heavily grazed these grasses screen, during the hottest portion of the year, the soil beneath them, and thus regulate the process of evaporation. By their close network of roots they form also a spongy mass, which absorbs the rain fall, and allows it to penetrate slowly the surface of the ground. Any covering spread over the ground, as a light mulch, will show the effect, and demonstrate the value of shade in promoting the fertility of the soil. It is this which has made the newly cleared forest land so rich. The leaves falling year by year not only decay, and forming a dark mould abounding in humus and potash, but also absorb and retain the rain fall, and keep the soil beneath porous and receptive, so that it readily takes up the more soluble constituents of both the water and the decomposing leaves and fibrous matter. In this

way green crops, even while growing, render valuable aid in the renovation of worn out or partially worn out lands, and when subsequently ploughed under conveys to the soil not only what has been drawn from it, but also the stored up elements absorbed from the atmosphere. These crops not only by their decomposition furnish a portion of the vegetable mould which such soils so much need, but also supply the alkalies that are upon analysis found in their ashes. That the land must of necessity become richer by the burial of such a crop will be understood by recollecting that three-fourths of the organic matter contained in a green crop has been derived from the atmosphere.

### MARYLAND FISHERIES AND FISH CULTURE.

The earliest account that has come down to us of Maryland, or "the Land of Maria," as pious enthusiasts were fond of calling the new colony, are enthusiastic over its rivers swarming with fish.—Father White tells us in his story of the landing of the Maryland Pilgrims, that the Chesapeake Bay and its tributaries "abounded with sturgeon, herring, crevices, (meaning "crabs,") shrimp, *topedoes?* trout, mullet, *urchins?* rocket fish—we call them "rock" fish—together with salmon, oysters, periwinkles, and others of that kind of innumerable names and unknown species."

So, also, Captain John Smith, the first explorer of the Chesapeake, the Potomac, Patuxent, and the Susquehanna, gives us as natives alike to Maryland and Virginia,—"the sturgeon *grampus*—*porpoise*, seal, brets, mullet, white salmon, trout, soles, plaice, herring, coney fish, rock fish, eels, lampreys, cat fish, shades, perch of three sorts, crabs, shrimps, oysters, cockles, mussels," and many unknown kinds.

All through the early history of the State to within the memory of men still young, it is incontestable that the rivers and streams in Maryland were the favorite breeding places of multitudes of fish. Gradually, however, our tributaries to the Bay have been depleted by net and seine, and weir, and also through the construction of dams, which being thrown across the rivers have prevented the fish from ascending to their spawning grounds. In many cases manufacturing establishments, erected on the borders of our streams, have so tainted the waters for many miles that the fish have almost ceased to frequent them, and some of the better varieties are not now to be found in them at all.—This decline in the quantity and variety of fish that were once common to our rivers and smaller streams, and whose spawning grounds seemed to replenish the fish in the Bay, is not, however, peculiar to

Maryland. The same process has been going on in other States—with this difference, that whereas in some of the other States practical steps have been taken to provide a remedy, nothing more than partial, limited and isolated experiments, looking to the same end, have been made in Maryland.

The lecture on Fish Culture, which was delivered by Mr. Roosevelt before our State Legislature, at its last session, elicited a good deal of attention at the time, and promised from the success which had attended the artificial propagation of fish at the north to lead to equally good results with us.

We regret to say, however, that the movement so auspiciously entered upon has not been vigorously followed up. Whether a commission was appointed at the time by the Legislature, or whether it finally fell through in the hurry of the session, we do not know. One thing, however, is certain; nothing practical has been done in the way of replenishing our rivers, except in one or two instances, and in these cases they were not favored by State aid. That fine fish, the "black bass," has been transferred from its native rivers to the upper waters of the Potomac, where in the course of a few years it has so increased and multiplied that it is now making its appearance in the Monocacy also. What it now needs, and, indeed, what all our rivers need, is protection by law against destructive modes of fishing. We have made laws for the protection of the oyster, and it has become a source of revenue to the State. We must also make laws for the protection of our fisheries. We cannot go on recklessly cropping our water fields forever, any more than we can carry off successive crops of grain from our farm lands, without ultimately bringing on exhaustion.

SOOT.—Although almost ever since agriculture has been practiced, and that we believe is ever since the creation of the world, soot has been known to be a valuable manure, and yet in the 19th century there are hundred of farmers who cannot be persuaded to believe this. It is really as valuable as guano. Take a hogshhead of water, and dissolve in it twelve quarts of soot, and you will have a splendid liquid manure for plants. Apply to the root's of course, and then watch the results.

THE KIND OF SHEEP OUR PASTURES RAISE.—The Cambridge *Chronicle* says: A ewe the property of J. N. Dawson, Esq., gave birth to four lambs, all perfect and hearty, and they are now frisking about with the sprightliness proverbial to their race.—Judge Sam. Pattison's flock of nine ewes has within the last two weeks brought forth twenty-two lambs all of whom are in a flourishing condition,



## NOTES AND COMMENTARIES.

BY PATUXENT PLANTER.

## IMMIGRATION.

In an able review of Governor Bowie's message to the Legislature, by the field editor of "*Turf, Field and Farm*," on the subject of immigration, some striking local and convincing views are set forth well worthy the attention and careful reflection of legislators, and all who are interested in this important subject. He, Col. Skinner, urges the necessity of having an agent thoroughly versed in the geography, history and physical condition of the State—who is well acquainted with the soil, the resources and the character of the people of the different sections of the State, and a man who can expatiate intelligently in public and private upon the advantages to those who may wish to settle within her borders.

The people of Europe are ignorant of the great advantages of homes in the border States over those in the far West. If they know anything it is through the immigrant agents of the railroad companies, having lands for sale, and are induced to emigrate for the purpose of occupying the wild lands, at low prices, belonging to those companies. These lands are to be reclaimed far from market, outside of civilization almost, with no fences, house or barn, no churches, mills, stores or schools near. If they were satisfied that they would save the great expense of travel over such immense distances, and that they could purchase lands in Maryland at almost the same price, having all the benefits above named, and near large markets, where the products of their labor would net them four-fold, they surely would not hesitate to settle in our old State, rather than go to the far West to encounter savage men, and cold climes, and unpeopled wilderness, cut off from all the opportunities of educating their children, and all the pleasures of fostering an agreeable association with kind neighbors.

It is the interest of railroads to take them off as far as their roads run, and hence these misguided people leave what would to them be a Paradise, compared with their forsaken homes of the old world, in search of an Eldorado, which when found proves an unbroken wilderness or limitless prairie, the home of the wild Indian, the pasture of the buffalo and the haunt of the bear and wolf.

Let an agent be well paid, and sent to England or France or Germany, and there hire laborers, gardeners, miners, mechanics, waiters, servants for the house, dairy women, herdsmen, &c., for parties here and consign them, with signed contracts, to the employer here. There let him engage to sell land here, if the farmer likes it on seeing it.

Many would be the well to do farmer, who would be induced to collect his property together and come over to establish himself and his children on fee-simple estates, the cost of which, per acre, would be less than a yearly rent in England, for land farmed in the same expensive manner would yield as much per annum. Let the farmers of England understand that good land near a railroad and close to a city, in a healthy region, can be bought for the same that he pays annually as rent, and many will leave old England for free Maryland.

## Small Farms.

It is surprising that so large a class of our working farmers prefer renting farms by the year, subjecting themselves to the loss and inconvenience of moving ("three moves equalling one fire,") every every year or so, to purchasing a small farm. I know a man who had \$2000, and bought 100 acres of land, 10 acres in wood and low ground, and 15 he enclosed for pasture, the rest was in one field. He paid \$1000 cash, and spent the other \$1000 in building a comfortable log-house, and fitting up the tobacco house on the place for his horses, &c., at the same time for curing his crop of tobacco and housing his corn. The farm cost \$3000; terms one and two years. He paid for it in that time; he had one son and two industrious daughters, and hired a boy and girl; kept two cows and three horses, one being a mare, from whom he raised a colt each year; killed more pork than supplied his family during the year. The poultry, lard, bacon, eggs, calves, beans and potatoes, clothed and fed, paid taxes, and hire of extra hands. He rented from a neighbor some corn ground, and got the use of a house to cure some of his tobacco.

In five years his land has been paid for—snug buildings erected, outline fences in good order, and a moveable fence for enclosing a fresh lot each year for pasture, and has three fine colts for sale worth \$500, with the farm increased in value (by buildings and improved fertility, being drained, cleaned, and manured) to double its cost to him. His system is admirable, now that he is not forced to work so much land. All the manure he can scrape together, he spreads over the pasture lot, and it amounts to a great deal during the twelve months, besides the dropping of the stock, weeds and rubbish, he collects straw, leaves, tobacco stalks, and feeds his stock in autumn and good weather in winter on corn fodder scattered over the thinner spots. Thus this 15 acres is rich for tobacco, potatoes, turnips, cabbage, &c., and is after tobacco sown in grain and clover, while another 15 acres are prepared for pasture, being sown in rye and clover with the growing corn, so that by 1st of May when the stock is taken from the old pasture, number two is ready to receive them with a fine growth of rye and clover. Thus he goes on,

I know not one steady industrious foreigner who has not bettered his condition by his emigration to this country. A Dutch blacksmith came among us some years ago, poor and ignorant and can even now talk English, so as scarcely to be understood. He is the owner of 450 acres of poor land, though much of it is in good wood, on which are two respectable dwellings, three tenant houses, a wheelright and blacksmith shop, and all paid for, as I learn. This accumulation has been the work of his own hands and that of his family. It is true he bought at low prices from persons forced to sell. This is not a rare thing in these times. Such facts should be spoken and written in foreign lands, and talked over by agents in the homes of the English, French and German farmers. They would then recognize the importance and the advantages of their settling among us, our waste lands would be peopled, our population increased, taxes lessened and the material wealth and prosperity of the State rapidly magnified. The State cannot of itself effectually create an influx of immigration, but it can do much by lending its countenance and generous aid; it must be brought about by a concert of action of the whole people individually, for all would be more or less materially benefited.

### Wooden Drains.

FARMING IN NEW JERSEY—PROFITS AND LOSSES.—  
At a meeting of the Farmers' Club, at Woodbury,  
N. J., CLEMENT WHITALL gave the average loss and  
profit per acre for five years, on the following crops:  
Peas—Loss of \$6.21 per acre. They only paid one year in  
the five.

Citrons, net profit.....	\$115 43	per acre.
Early Potatoes, net profit.....	41.24	"
Wheat, net profit.....	29 65	"
Tomatoes, net profit.....	81.16	"
Sweet Potatoes, net profit.....	35 61	"
Asparagus, net profit.....	124 42	"
Cabbage, (only 2 years) 1st years profit...	8.00	"
" " " 2d " "	45.00	"

Beans—\$13.54 loss per acre.



*For the Maryland Farmer.*

## UNDERDRAINING.

BY J. WILKINSON, BALTIMORE.

No work of improvement of land has given a better return for the money expended, than judicious underdraining.

Very few farmers, however, understand what constitutes judicious underdraining. It is both a difficult art and a complex science.

The greatest barriers to a more general resort to underdraining, by which to reclaim lands that, in their present condition, are not only worthless, but are a nuisance, is the want of a knowledge of the *modus operandi*, and the want of means necessary to meet the cost of execution. To these may properly be added the discouragement to the inexperienced, presented in the numerous failures that have resulted from attempts at the performance of the work, by men utterly ignorant of the most important principles involved, and the want of the necessary means and materials.

The writer, in an experience of over thirty years in underdraining, has known the cost of construction of the same character of underdraining to vary seventy per cent. owing to local circumstances and facilities.

A ditch may be cut and filled of a given dimension in a favorable soil and with the best facilities, at a cost not exceeding 50 cents per rod, including the draining material, and returning the earth excavated; yet, under other circumstances, a ditch of the same dimensions and with the same draining materials, the actual cost may reach two dollars per rod.

The very remarkable difference in the cost may arise from the following circumstances, viz.: the difference in the texture of the soil, the quantity of water in it at the time the work is executed, the inclination in the banks to "cave," quick-sands struck, or stones difficult to remove encountered, the difference in the implements used, and the skill in their use, also from the distance the draining material is to be hauled, even where the same materials are used, and at the same cost at the kiln—supposing the draining material used to be baked clay tiles.

The difference might easily be much greater in case stones were used, which is very common in districts in which small surface stones are abundant, and need to be removed for convenience in tillage, and operating reaping and mowing machines. But in the latter case, the entire cost of gathering, hauling, and placing the stones in the drains, should not be charged to the draining account.

I would here state that the average cost of drain-

ing pipes, two inch calibre, and in lengths of one foot, is, in most districts in which I engineer drains, about fifteen dollars per thousand feet, at the kiln. At this cost, we find that we can construct drains at less cost, and haul the pipes from four to five miles, than we can where we are compelled to gather small stones from the surface of the land, or in the use of the refuse from a neighboring quarry, allowing the latter to cost nothing but the hauling and handling.

The cost of excavation of drains for stones as a draining material, is always greater than is required in the use of tiles.

This difference in the cost of the ditch is not unfrequently a heavy item. I have found little difference in the efficiency of drains of stones or pipes, if both are properly executed.

There are circumstances, however, where either may be preferable to the other, e. g. in soils infested with "crawfish," the efficiency of the stoned drains is soon destroyed, as they fill the interstices and clog the drain.

In the case of the use of tiles in quick-sands, unless more than an ordinary degree of skill and judgment is exercised in guarding against the pipes settling unequally and displacing the joints, the work is generally lost, and re-execution is generally more expensive than it was at first.

Under such circumstances, stones are decidedly preferable.

I have, however, found it very useful and satisfactory to use a section of stones for draining material through the quick-sand veins, connecting the pipes with the stones both above and below, that is, on either side.

### QUICK-SANDS—HOW MANAGED.

I have also found great advantage to arise from excavating that portion of a drain where quick-sands are encountered, a foot or more deeper than the balance of the drain, and filling this well, or elongated pit in the bottom of the drain with stones, up to a level with the bottom of the drain on either side, and then constructing a stone or tile drain on them; preferring the former, if the vein of quick-sand is struck at any considerable height above the bottom of the main line of the drain. The object of the pit, or deeper excavation at the points where veins of quick-sands are found, is to provide a reservoir into which the sand may fall and there be retained, instead of its flowing on with the water, and lodging at some more gentle grade in the drain, or at its mouth, and thus clogging it.

I have also practiced the use of such pits in the bottom of underdrains, whatever the quality of soil may have been, or the material used for drainage, placing them ten to fifteen rods apart, filling them

up to the level with the bottom of the drain, and building the drain over them.

#### PITS FOR DEPOSIT OF DEBRIS.

I find that they provide a place of deposit for all sand and debris from the bottom and banks of the drain if made at proper intervals, and effectually prevent the drain from clogging, and from making an excessive discharge at the mouth or discharge.

If the drain is neglected as they generally are, the discharge at the mouth will frequently accumulate so as to clog the mouth and set the debris back, and destroy the drain. The writer has known this to occur in numerous instances, and thus destroy a drain, which, but for it, would have been of permanent efficiency.

#### THE PROPER TIME FOR DRAINING.

The circumstances under which the work of draining is to be performed are so varied that no rule can be made applicable to all. Where "wet weather springs," or the leachings from high land break out at the base of a hill, and maintain a degree of wetness unfavorable to tillage and the growth of cultivated crops, for a long time subsequent to rain-fall, it will be remunerative to cut an underdrain along the base of the hill, and so to locate it that it will intercept the water at a point below the surface, fully one foot. To make this instruction more intelligible, the line of the underdrain which is designed to receive such water as I have described, should be located along the base of the hill above where the water flows out upon the surface, and far enough above, or high enough up the hill slope, to cut off the water percolating the soil at the depth mentioned, or before it shall approach the surface so nearly as to unfit it for the production of cultivated vegetation.

The proper time for locating such a drain is a few days after a heavy rain-fall, whilst the soil at the base of the slope is fully charged. The least expensive, most reliable, and ready means of deciding the proper locality for such a drain that I have been able to devise, is by sinking small wells, or pits, to the depth that I have named, a few rods apart, all along the base of the hill, locating these test pits above where the surface appears to be wet. Cut the pits a foot in depth, and observe the depth at which water will stand in them, say twelve hours after the pits have been opened—also observe at what depth below the surface, on the upper side of the pits, the water appears to flow out of the bank. If any considerable flow of water is found to filter into the pits at a less depth than ten to twelve inches, a line of test pits should be cut farther up the hill.

The line of pits, say two rods apart, should be located by the use of a spirit level, that they may

be in a proper line for the axis of the drain to be cut.

#### THE FALL NECESSARY.

The fall required in an underdrain to make it effective is very slight. In a drain for the purposes under consideration, a fall of one inch in ten feet will generally be sufficient.

It is a very common error to give too much fall in underdrains.

The effect of too much fall is to cause the water in the drain to flow so rapidly that it will wash the sides and bottom of the drain; if the draining material consists of stones, however they may be placed in the ditch.

#### THE EFFECT OF WASHING.

The effects of washing, occasioned by too rapid fall in a drain, are the displacement of the stones, and the deposit of the washings at some more level portion of the drain, or at its mouth, either of which may destroy the drain; hence, should be carefully guarded against.

#### UNAVOIDABLE EXCESSIVE FALL.

It frequently occurs that excessive fall in a drain cannot be avoided, under which circumstances, if stones are to be used, they must be so laid or placed in the drain as to prevent washing. More than twenty years ago, the writer tested a great variety of modes of placing stone drainage, with a view to ascertain which was the most effective. A series of carefully conducted experiments established the conviction that there was but one way by which the washing of the banks and bottom of stoned underdrains could be effectually prevented, a description of which I have repeatedly published; but I was not a little surprised to find illustrated and recommended, in an editorial, in a late number of the *American Agriculturist*, under this head, "*Making Stone Drains*," three of the most objectionable modes of placing stones in drains, known to me, and no mention is made of that which I am convinced is the best and the only efficient and durable mode of making stone drains.

(To be Continued.)

**BEANS AMONG CORN**—A correspondent of the *Vermont Farmer* rows his corn but one way, and puts a hill of beans between the corn hills, in the row. He planted three pecks of beans in this way, in a four-acre corn lot, and harvested eight bushels of nice beans.

**Preparing Cold Land for Corn**—Another farmer says: On land that is rather cold for corn, it will do better to turn two furrows together, and plant on the ridge thus made, as a warm, dry soil is best for corn.

A recent executors' sale of cattle in California netted the snug sum of \$40,000, which rather dwarfs similar stock transactions on the Atlantic slope.



For the Maryland Farmer.

### TO YOUNG FARMERS.—No. IV.

You have all noticed, doubtless, that from newly cleared lands, where the logs, brush and other stuff have been cleaned up and burnt off, that much better crops are procured than on old lands. This results from several reasons; but chief of all is, because the new land, recently burnt over, is rich in alkali and phosphorous—the first of these ingredients being supplied by ashes in burning so much vegetable matter; and the latter from the shells and decay of many snails, bugs, worms, &c., which fill the wild land, but are destroyed by the burning and first plowing. Potatoes, corn and wheat contain large quantities of alkali and phosphorous, and of course will thrive and yield better on a soil rich in those substances: particularly potatoes and corn—hence, a handful of old leached ashes, or slacked lime, sprinkled on the hills or mixed in compost planted in the hills will give most profitable results. Those crops also contain and require large quantities of silica, in the shape of dissolved sand and crystals; and besides supplying alkali to the growing plant, these ashes and lime aid in dissolving and decomposing the other substances of the soil, so that the young plant can appropriate them, and suck them up in the process of growing. I have seen a two-acre lot of land planted with potatoes—where the quality of the soil was the same in all of it, and it was all thoroughly manured and deeply plowed and well harrowed; all planted with the same kind of seed, and the cultivation of both acres the same with the single exception that one acre was treated to a large handful of old ashes and lime to the hill, mixed with about half that quantity of bone dust, well mixed with the ashes some days before—the compound being sprinkled or thrown on the hill, and lightly covered with the hoe at the time of first hoeing. The result in yield was—that on the ashed acre of the lot very nearly five hundred (490) bushels of superior potatoes were harvested; while on the other acre, with no ashes, less than four hundred (395) bushels were obtained.

Here is a difference in yield of much more than enough to pay the extra expense, while the land is also better for the next crop.

Where these old ashes and lime are not easily obtained and fertilizers must be purchased, the cheapest and most convenient substitute is *sal soda* from the stores, mixed with soil and a small quantity of *ground bones*—in the proportion of about one part of soda to ten parts of bone, and one part of this mixture to twenty parts of common soil or earth—and applied about a pint to a hill, or sprinkled, about the same quantity in the drills for sowing garden seeds; the extra yield from it will more than

doubly pay the cost in the first crop, while the soil is better for succeeding crops. There will be less ravages from insects under this treatment than without it. The results will be all the better if a quantity of *guano*, equal to the bone, be added. Let it all be well composted and stored in a heap, keeping well covered with the earth, that the gasses be absorbed and not allowed to escape—and they will soon be fixed in the earth so as to be applied to the hills and drills without loss. Like all other operations that are worth doing at all, it should be carefully and well done. It is also an excellent fertilizer to be drilled in, or sowed on with the wheat crop; but on whatever crop it is properly used it will much more than pay the expense in larger yield of superior product. Salt is beginning to be more extensively tried and proved to be a valuable and cheap fertilizer; and as it becomes better known it is more highly valued and appreciated. One man in New Hampshire the past year applied over a thousand bushels on his wheat fields and meadows, deriving more than a third increase thereby; and he intends to use several thousand bushels during the coming year. In years past I found it valuable both on field crops and in the garden and orchard, and among small fruits or berries, applied in small quantities, mixed with common soil before applying; and it gave return much more than the expense.

In view of this fact, it is encouraging to see active efforts being made, in and out of Congress, to have the duty tax on salt removed. It should be done, for nothing more largely enters into the farmer's operations—his dairy, his meats, his food, his stock, curing feed and fodder—and as a fertilizer the "salt is the savor of the earth," and should no more be taxed than water or rain.

LAND MARK.

### Turnips—Turnips with Corn.

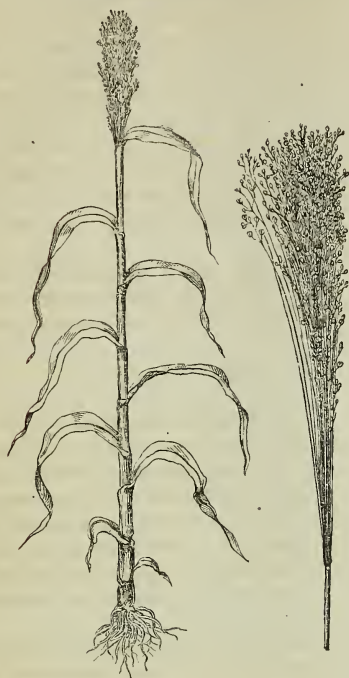
The following discussion was had at a late meeting of the Central New York Farmers' Club, on turnips with corn, &c.:

Mr. Williams spoke of a cheap way of raising turnips in the hill with corn. He sprinkled layers of turnip seed through the load of manure before it was drawn to the field. When the manure is placed in the hills of corn a shovel full at a time, the turnip seed goes with it, and grows with the corn. The only expense of such a crop is the gathering.

Mr. J. W. Lyon, of Whitesboro, said he had for the last twenty years been trying to discover which was the best turnip. He now pronounced in favor of the white Swedish, or the French turnip.

Mr. Batchelor said the white Swede and the white French turnip were identical. The Rhode Islanders raised the white Swede—raised it better than it has ever been obtained elsewhere—and they called it "French." He also spoke of the Aberdeen, valuing one good Aberdeen as equal to half a hushel of the strap-leaf variety.

## DWARF BROOM CORN.



We are indebted to R. H. Allen & Co., of New York, for the above illustration, which, with the brief remarks subjoined, we copy from their beautiful Illustrated Catalogue of Garden, Flower and Field Seeds and Grains :

"This grows only three to four feet high, and is now much cultivated in preference to the old, tall-growing sort, as it yields nearly double the quantity of clean brush per acre, and, at the same time, is not a great exhauster of the land.

"A deep, rich alluvial river-bottom, or fine, rich prairie soil, is the best for the production of Broom Corn. New, light soils yield a fair crop, when highly manured with well-rotted compost.

"The cultivation is the same as for the old, tall-growing kind, but it may be planted, if desired, a little closer. Four quarts are required to sow an acre."

We offer the following as to the "Soil and its Preparation," and "Sowing the Seed," for Broom Corn :

**THE SOIL AND ITS PREPARATION.**—Broom corn flourishes best on rich, sandy loams and upon alluvial soils. On gravelly uplands and tenacious clays the plants cannot be grown successfully, as the brush is liable to be coarse, crooked and scrubby. The land should be free from stones and of a character to be easily worked and kept mellow.—

Plow early in spring and work with cultivators or drags until the soil is thoroughly pulverized, then roll it smoothly, so that a nice even seed may be had. Good crops are raised upon the inverted sod when the land is of suitable character and has been well prepared. Sod land has this advantage—there is less trouble from weeds. The plant is of a different genus from Indian corn, and will not mix with it ; but like Indian corn, it will pay well for composting and good cultivation. It should not be planted on wet, cold land.

**SOWING THE SEED.**—The land being nicely prepared, the seed is generally sown as early in spring as the condition of the ground will admit.

Broom corn will not endure so much cold as Indian corn, and therefore should not be planted so early as that crop is sometimes put in. It is of slow growth and requires warm weather in order to the formation of its lateral roots. In New York State, where the crop is extensively grown, the usual time for planting is from the middle of May to the first of June.

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**ALSYKE CLOVER.**

Of this clover, of which so much has been said in its favor as a honey-producing plant, the *English Farmers' Diary*, for 1872, says :

*Alsyke*, or *Perennial Hybrid Clover*, which takes its name from the *Alsyke* district, near Stockholm, was first introduced into Sweden. Within the last century, vast improvements in agriculture have enabled this valuable clover to be brought to great perfection, and it is now held in high estimation by the Swedish farmers, and extensively cultivated by the leading agriculturists in Great Britain and Ireland. The root is fibrous, and the heads globular. The plant bears a greater resemblance to the White than to the Red Clover, and may be described as the Giant White Clover, with flesh-colored heads. The advantages it possesses over every other variety of clover are : Its perennial or permanent character—its greatest hardiness (for no winter will kill it)—its capability alike of resisting the extremes of drought and wet—the much greater weight of herbage it produces during the season, and the certainty of a plant, when other varieties fail, from the land having become clover-sick. Its powers of production are inexhaustible, as is proved by the wonderfully curious formation of the plant, from the single crown of which innumerable heads are continually being produced all through the season, and tillering out laterally over the ground. The hardy nature of the plant is proved by the fact of its thriving by transplanting. A single plant may be taken up and divided into ten or more parts, the fibrous roots just cropped, and each part will produce a luxuriant plant—so that no farmer need ever hereafter have a patchy piece of clover. Twelve pounds of Swedish *Alsyke* is sufficient to sow an acre.



For the Maryland Farmer.

# JAKOBB DUNK PAPERS ON FACTS, FILOSOPHY AND FARMING.

## PAPER NUMBER VII.

### ON USURY AND CAPITALISTS.

Jakobb Dunk rode up to my house the other morning, hitched and walked in—his pipe was with him—with his usual

"Mornin, Joodge."

The time of his arrival was 9.15 A. M.

I was glad to see him: the visit of a "philosopher" of that school are always characterized by a series of highly instructive dogmas which have the additional merit of being interesting and suggestive; suggestive of this reflection—if the race *now*, after centuries of culture, with all the light and power and glory of modern civilization around it, manifests such intense antagonism to its own welfare, what could it have been *then*?

"Good morning, Mr. Dunk," I replied, "walk in; bad weather for wheat this last week or two."

"Misable," said Jakobb, and he talked like a man who has a long speech on his tongue, and don't want to forget it. I noticed his difficulty and left him to unload his burden. After rolling the subject around a few times to get a fair hold of it, I suppose, he began: "Joodge," said he, "I've a kind of a spekelation on hand."

I asked him "if he had set it a foot yet," but his spirit was not mirthful.

"The widder Johnson wants to sell out; all her boys have gone to town, and she's got nobody there to tend to things, and she'll take a thousand dollars for the hull thing in cash."

"How many acres are there?" I asked.

"Fifty," said Jakobb, "she say's she can make more out of the money than the farm, and I've had the fust offer."

"And so you have bought it, I suppose; and now," I added, "what a time you will make; how you will go to liming and raising grass and improved stock and building big barns, and ditching and fencing and supporting libraries and schools and lyceums: really Mr. Dunk," I went on with much fervor, "I must congratulate you upon your good fortune and enterprise."

"You're a leetle too fast, Joodge," said Jakobb, "I haint bought it, but I would like to."

"Why dont you? there's money in it at that figure," I replied.

"That's the very pint; I could make something out of it, only I haint got the money and don't know where to get it: 'pears like money was gittin' scarcer and scarcer, and a feller has to work harder and harder: time was in them old times a

man might go out when he was a leetle short and raise what he wanted in no time, but somehow things is changed; so many new-fangled ideas is got into folks, a body can't git along like he used to: now here's this widder Johnson propity; there's a house and garden on it, I could let for fifty dollars a year; there's a barn I could put to-bakker in"—here, I pulled out my pencil and set down the fifty dollars and asked:

"How much every year would the use of the barn be worth?"

"I've been a paying her ten dollars fur it, since she's been a workin' the land on sheers; its sich a handy place for terbakker and workin' a rainy day's."

I put the ten dollars down, and Jakobb went on again.

"And then the place jines mine; in fact was won't part ov it, but"—and here followed a perfect transcript of the land records of Purland county, from the time of big-hearted Lord Baltimore and his liberal programme, together with a spicy genealogical account of the successive owners of the property in question. By the time he got through he had left very few sound characters in the neighborhood.

However much we may deplore and despise the morals of these gossips, we must offer to their wonderful memories the tribute of our sincere admiration.

After Jakobb had got around to the place again he continued:

"Then there's the wood on it; there's twenty-five acres of woodland, and ef there's one cord of wood on it there's seven hundred; leavin' ten acres for the farm, five hundred dollars worth of wood could be sold and the place not miss it. Then that bottom land cuts about three tons of as good hay as a horse would want to chaw on: the upland is poor but it's kind land, and lies warm and easy to work ef a body could get a hold of the money. I heard Colonel Hatton say up at the Codge only yesterday, he'd give three dollars a cord for wood delivered at his kiln, and as soon as he hears of this place he'll jump at it: I could a made a nice thing a day or two ago, too: Hense Bolger sed if I'd buy a cow he wanted, for forty dollars he'd give me sixty in six months, and glad to do it, but I 'spose there's no gittin' hold of the money way things is goin' on: these fellers that's keeping money locked up to keep up the prices, ought to be made by law to shell out and keep it circulating; but what do you think about gittin' the money, Joodge? You know more about them town ways than I do; do you think a feller could raise anything there?"

Before this question came out, I had foreseen the



object of Jakob's visit, and had finished my figuring, and was ready for another skirmish.

"Mr. Dunk," I replied, "I can get you what money you want."

"Kin you," said Jakob, some what elated, "well as I am borrying, the old place wants fixing up, and I thought I'd go five hundred on it to slick things up a little if you think you can make the arrangement; how much per cent. kin the thing be done for?"

"First," I replied, "let us look over some figures I have made here; you say the house a'one can be let for fifty dollars a year?"

"Yes! house and garden: 'bout half an acre."

"And you can sell five hundred dollars worth of wood off?"

"Easy."

"And the barn is worth ten dollars a year.—Now what are the three tons of hay worth?"

"Call it twenty dollars a ton, and knock off five dollars for delivering."

"That will make forty-five dollars. Now that takes up with the ten acres of woodland about fifteen out of the fifty acres. How much can you clear over and above expenses, taxes, &c., out of the remaining thirty-five acres?"

"Dont know, Joodge; the land is pooty lite and wont raise more'n four barrels of corn, but seed it down and its kind land and will keep three or four cows in summer, that ought to clear say seventy dollars."

"We will put it down at half that, although the land ought to produce in sheep raising just twice your figures."

"Dogs is so hard on sheep," broke out of Jakob, before he remembered his vigorous opposition to a dog law.

I looked a very mild look at Jakob on that "pint," but said nothing.

Silence is awful bad company for a guilty conscience. Finally he got tired of thinking on that subject and swung around to the percentage question.

"Joodge," said he, "how much interest do you think I'll have to pay for the thousand?"

I was prepared for the storm and quietly answered:

"You will have to pay twelve or thirteen per cent. for the money."

Cold water all over him would not have shocked him more.

"Wot," said he, "twelve per cent. fur money?"

"Twelve per cent. for money," I replied.

Jakob unbuttoned his coat, drew a long breath, put his hand in his vest pocket, pulled out his tin case, put on his spectacles and looked at me right over the rim of them.

I never could understand why a person wastes thirteen minutes of precious time in putting on a pair of spectacles, just to look at you over the top of them.

But I suppose that was part of his "filosophy." And then he began:

"That there thing, Joodge," said he, "is perfect robbory. Them men that spekelate in the sufferings of their feller creeturs by charging them odashus rates o' intrust aint fit to be loose. Its agin all law and ail gospel to take usury, and if I was a rich man, I'd jest git up a case and make 'em sweat for it. Do them capitalis think we farmers is goin' to submit for ever to everything they say, as got to be done? I tell you, Joodge, there'll be a revolution byme by. I'll git up a petition to the Legislatur to have the law forced agin them bloated bond holders that's grindin' down on poor people, takin' all their hard yearnings to pamper their over-fed karkasses. They say they, jest stuff their mattresses with greenbacks to keep money from cirkelatin', and that's wots makin' it scarce, and here we've got to work our lives out to uphold 'em in it. Where's yer Legislator? Wot's yer law good fer, ef it dont reach them scoundrels?" (Jakob certainly was on the rampage.)

"Wot rite hev' tha' got to ride round in their carriges domineering over poor folks, and when a poor hard workin' honest industrus man, yearnin' his livin' by the sweat of his brow asks fur a little loan, oh, its twelve per cent. fur money! Them a nice plus set. Their pews is all cushined, and they've got a through ticket to hev in without change or cars. Kin you tell me wot legislators is built fur?" he asked.

"To make good laws for the people, I suppose," I replied meekly.

"Well," he continued, "wots the use of laws ef tha' haint egserkuted?"

I really could not tell him, and acknowledged the question was one of profound importance.

"I'll tell you how it is; we haint got the rite men there, and we'll jist inquire into this matter and find out wot they're sent there fur; there's no chance fur a poor man, way things is now"—and so on and so forth for about half an hour. Now the "bloated bond holder" in this instance was no other than the "widdier Johnson" herself. She had lost a husband in the war, had one boy crippled and helpless at home, and had asked me to make as profitable an investment for her as possible, as she would be dependent in a great measure upon her income from that source, and I concluded to let Jakob have the money by giving a mortgage on both places for the security.

When Jakob got through, I said:

"Mr. Dunk, precisely what percentage would you

have made, if you had bought the cow from Hense Bolger as you say you would have done if you had had the money?"

"Dunno'; 'bout ten per cent. I 'spose," replied Jakobb.

"Well, I know," I said, "its one hundred per cent." This surprised Jakobb very much, and he asked:

"Where's your figgers?"

"Never mind the figgers," I said, "I have given you facts. Now, would it have been right to make that bargain?"

Jakobb "didn't see nothing wrong about it."

"But it was a percentage 'beyond all law and gospel,'" I said, quoting his own words. The gospel word means that *no* percentage whatever should be charged.

"It was a fair bargain," said Jakobb, and he was nearer right than he knew: he was more philosophically 'fillosophical' than he was aware of.

"Now, Mr. Dunk," I continued, "how much percentage do *you* expect to make out of the widow Johnson property, according to your own figures?"

"Not twelve per cent.," replied Jakobb.

"Yes, *twenty* per cent.," replied I.

"Let's see yer figgers," said Jakobb, "or I wont believe it."

Then I showed him my figures.

1—Rent of house.....	\$50 00	per annum.
2— " " tobacco house.....	10.00	" "
3—Three tons hay @ \$15.....	45.00	" "
4—Interest on the \$500, realized from sale of wood, at 12 per cent. ....	60 00	" "
5—From remainder of farm.....	35 00	" "

\$200.00

"Which is just twenty per cent. on one thousand dollars," I added, "clearing you eight per cent. on the investment, to secure which you must give a mortgage on both places, pay interest semi-annually, and pay all the expenses of the transfer; otherwise Col. Hatton will be the purchaser."

"Make out the mortgage," said Jacobb. I had convinced him *once* at last.

And the time of his departure was 3 15 P. M., and a South street man would have done the business in seven minutes.

Time is *not* money in the rural districts. In regard to this percentage question it appears a very hard thing to a farmer to be obliged to *give* a high per cent. for money, but it dont appear a very hard thing for him to *take* it. I know a man who grumbles very much if he has to make much of a discount in meeting his cash engagements, and yet that same man bought a brother farmer's—(and a brother officer's) paper at only one hundred per cent. discount. And over all Maryland, the statute concerning usury is a farce: it is worse than a farce; it is a fraud: for while the law in principle—in consonance with the principles of private and

individual honor—affects to consider a contract inviolable, by this statute it opens a door to fraud and says, "I will assist you to break the agreement you have entered into, and although the other party trusted to your honor; although he will be a heavy loser by your failure to perform *your* duty under the contract, never mind; the armor of the law shall protect *you*, and the result is that the law, which should be an unbroken rampart and the chief exponent of the principles of honor, becomes their greatest enemy.

Will the farmer take \$1.50 for wheat, when he can get \$1.60? Does he carefully note down the various items of expense in the production of his wheat, and refuse everything over six per cent. on his investment?

It would be considered an unjust law that would confine the farmer's profits on his wheat or other crops to six per cent. on his investment; and if the law has no right to touch *that*, it has no right to regulate or attempt to regulate the *product* of his labors.

After the farmer has sold his wheat, if he sees proper to invest the product in a horse at \$100, when he knows he can sell it for \$125, what law will touch *that*?

In other words, the farmer may exchange his wheat for hardware and crockery, and make 20 and 50 per cent. on them, but if he exchanges it for money, he must only make six per cent. on it; the disregard of the law is the best comment on its absurdity. I have found, however, that the class which opposes most vigorously any change in the law, is always ready to make fifty per cent. out of its investments, if possible.

Again, money is not always of equal value.—Numerous causes are constantly in operation to appreciate and depreciate this value which represents the relative values of the different commodities; for instance, the laborer got six cents a day in the olden time and could buy more than he can now with ten times that amount, and notwithstanding restrictive statutes, when money is scarce or in great demand interest will be high; when it is abundant, it will be lower, obeying like everything else the laws which govern demand and supply.

Let us glance briefly at the causes which have operated to place restrictive laws on statute books, and then calmly consider whether their existence is now necessary to protect the borrowing classes; I say classes, for all classes are borrowers in our day of complex financial and commercial relations.

About 500 years B. C. the two great Roman classes, the Patricians and the Plebians, began to agitate the question of their respective rights and privileges. The struggle lasted for two hundred years, and exhibited the following features: The



Patricians, consisting of the first families, and the nobles insisted upon maintaining the ascendancy to which they had been accustomed, and claimed all the public offices as well as all the spoils of conquest. They declined to pay rent for the State lands—(those taken in war,) and threw the whole burden of taxation upon the Plebians.

All this was class legislation and evoked the class opposition of the common people, the Plebians, who struggled for political equality before the law, and complained of their poverty, the severity of the laws respecting debtors, and their exclusion from the public offices. The Plebians were poor because they received little or no benefit from the conquests: their estates were neglected and plundered while they were absent with the army: the whole burden of taxation fell upon them, and the rate of interest was exceedingly exorbitant.

(It will be seen at a glance, that no such relations as subsisted between the Patricians and Plebians of Rome obtain amongst us.)

The rate of interest was one per cent. a month, and principal and interest had to be paid in ten months. If a man borrowed \$100 and at the end of ten months was unable to pay \$110, he would have to borrow \$20 more, which would make his debt \$120: in ten months more his loan would be increased to \$144: in four years the original loan would be doubled. The condition of the Roman creditor was rendered still more miserable by the existence of the following customs:

After thirty days warning, if the debt was not paid, the debtor was put into prison for sixty days, during which he was taken to the Forum three times on market day's, and his debt proclaimed aloud to see if any one would pay it: if the debt remained unpaid the creditor might put him to death or sell him as a slave. If he had more than one creditor, he could be cut to pieces and his body divided amongst them in proportion to their claims.

But this lot could be avoided by the debtor's pawning himself and all his family to the creditor until he could work out his debt.

This extreme class legislation necessarily demanded the restraining influences of counter legislation, and we find that Licinius Stolo (B. C 376) introduced measures to check the evils under which borrowers labored: and wherever combination of any kind exerts an injurious influence upon individual right and privilege, it is within the province of the law to say that it shall not do so, for liberty of the largest kind is protected rather by a correct declaration of what shall *not* be done than in a guarantee of special privileges.

Now, no combination of lenders exists in Maryland.

It is evident that none can exist for all classes

are borrowing, and in the absence of special class combination against borrowers, the operation of the ordinary laws of demand and supply, are sufficient to preserve harmony, and prevent abuse without the interference of the legislative arm, which only operates as a disturbing element in the matter. It would be quite as rational for the Legislature to undertake to regulate the price of exchange on Boston or Liverpool, as to lay down rules on the rate of interest for money.

But what has been the result of the law? Ostensibly designed to protect the borrower, has it done it, that is if the borrower was honest? I say ostensibly, because that phase of the matter will be examined below.

Has the law accomplished its object? and what has been the issue of all such laws in the past? Were the sumptuary and similar laws of the early New England, French, English and Roman authorities successful? Fabricius, the Roman Censor, degraded Cornelius Rufinus from the Senate for having ten pounds of silver plate in his house, but notwithstanding prohibitory opinions and measures, Lulia Paulina represented two millions of dollars when dressed in all her jewels, and the Roman people became pre-eminently a luxurious people. In a time of scarcity, when the French populace was clamoring for bread, the French authorities undertook to regulate the weight of the bread-loaves, but the operation of a natural law proved stronger than a governmental edict. Abundance of a necessary article means low prices: scarcity means high prices: interference with this operation either by private, corporate or legislative action is either fraud itself or an open invitation to the perpetration of fraud.

A bill was before the Legislature during the session of seventy to make ten per cent. the legal rate of interest: of course it was voted down by the county members, "indignant at the outrage aimed at the agricultural interest, that mightiest lever of our social industries," etc., and the noble vindicators of the "mighty lever," went home and negotiated loans for their constituents at 6 per cent., the legal interest, *by the payment of a bonus in advance of 6 or 8 per cent. more*, and so long as the usury law remains unrepealed, so long the wave of foreign capital which would otherwise enter, will strike the borders of Maryland and blow around it to seek a less precarious home.

The question arises, what would be the result of an abrogation of the law?

One of the greatest lights in the financial world; one who has been consulted by the masters of the financial progress, and destiny of the American Republic on monetary matters has emphatically declared his opinion to be "that the general reduc-



tion of the rate of interest would follow the removal of all restrictions concerning it," and the fact that these restrictions do not secure a low rate of interest, as a negative argument; and the fact that it is positively urged that they induce a *high* rate of interest upon the ground of additional risk and the indubitable fact that as a general principle, the greater the risk the greater the profit, should induce a trial at least of the measure proposed, viz.

*Be it enacted by the General Assembly of Maryland:* That all of the so called usury laws of this State be and the same hereby are, repealed: and

*Be it enacted,* That in the absence of specific, verbal or written contracts to the contrary, six per cent. per annum be the legal rate of interest.

But the measure will not be passed.

If one political party should uphold it, the other would make political capital out of it and assisted by the unscrupulous office seekers of all classes, endeavor to "ride the tide" of agitation to a port of individual aggrandizement indifferent whether the living masses who would float them in, feasted on bread or stones; and so long as political excitement, with the concomitants of prey-hunters, votes and pottage, accompanies the agitation of independent questions affecting the peoples welfare; so long as these questions are decided amid the heated passions of partisan strife—in the Comitium and not in the Council—so long we may expect the dominion of prejudice instead of the government of reason.

I will give a few instances of this political agitation and close.

A certain candidate, he was able and also successful, during the last canvass, endeavored to make a great deal of capital out of an opponent for taking 10 or 15 per cent. for money, when two at least of the candidates on his own ticket were doing the same thing.

Again, it was urged against one of the present Senators that in the last Legislature (70) he had used his influence to secure the legislation of ten per cent. interest, when the very men he (the party who made the allegation) was working with, took ten or twelve per cent.

Again, it was urged against a prominent candidate for a higher office than Senator in the last canvass, that he took twelve per cent. for money; and yet, *the county that sent up that cry was groaning in the misery of its impoverishment.* Without desiring to be unjustly severe, it appears that opposition of the above character must spring either from ignorance or vice, for the classes to be benefitted by the abrogation are those which oppose it most strongly.

The *Ohio Farmer* thinks it is important to feed some straw every winter, as it seems to have a beneficial effect on most animals; it also thinks horses not at hard work do bettes on cut straw with a little grain, than upon hay and grain,

## ANALYSIS OF CORN COBS.

Considerable discussion has recently arisen in agricultural journals and at farmers' meetings upon the nutritive value of corn cobs when ground and fed to animals. It is a very common practice among farmers to grind the whole ears of corn, and feed the product to milch cows, working oxen, and often to horses. This plan we have adopted to a considerable extent at our own farm, but we have had some misgivings as to the utility or advisability of the practice. With the view of ascertaining as nearly as practicable the exact nutritive value of the cobs, we selected a nice ear of Lakeside corn from a bundle hanging in our counting-room, and removing the kernels, subjected the cob to analysis. It gave of

Water.....	7.48
Crude Fibre.....	30.95
Ash.....	1.16
Carbohydrates, fat, and albuminoids.....	60.41
	<hr/> 100.00

The amount of fat was not accurately determined but it was proved to be more than one per cent.—The amount of water is probably smaller than it would have been had the corn been taken directly from the grain house, instead of the warm room in which it had been hanging for some weeks. The results of the analysis prove that there is in corn cobs a considerable amount of fat-producing and flesh-forming constituents. In the sixty per cent. of carbohydrates, albuminoids, fat, etc., are found the elements which have nutritive value, and in order that we may obtain some idea of its comparative worth, let us contrast it with the dry straw of some grains. Wheat straw contains about 30 per cent. of carbohydrates 2 per cent. of albuminoids, and  $1\frac{1}{2}$  per cent. of fat; oat straw, 38 per cent. of the first named substances,  $2\frac{1}{2}$  of the second, and 2 of the third; rye straw, 27 of the first,  $1\frac{1}{2}$  of the second, and 1.3-10 of the third. It is shown that cobs have a higher value than wheat or rye straw, and they equal in nutritive constituents the best quality of oat straw. These results indicate the utility of feeding them to our animals, provided there are no objections of a strictly physical nature or objections arising from bulk and difficulty of reducing the cob to a sufficiently fine powder. It is not probable that cob-meal can be perfectly digested unless comminution is carried to an extreme point, and therefore the finer the cobs are ground, the higher the value, and the less the liability of gastric disturbance. It is certain we do not give sufficient attention to the matter of grinding any of the grains fed to our animals. They should be ground *as fine as possible*, in order that they may be easy of digestion, and in order that the nutritive substances may be fully utilized. There is a positive loss in feeding out coarsely ground grains of any kind, and in grinding the cob with the corn, give special attention to the work of comminution. The corn in the ear should be thoroughly dry before it is carried to the mill, and there will be less difficulty in reducing it to a fine powder.—*Boston Jour. of Chemistry.*

## WHAT A GRAPE GROWER SAYS.

Will the grape interest in our country pay? This is a question that thousands of our American people are desirous to see elucidated.

For my part, I have been compelled from the results obtained from the last six vintages to almost doubt the propriety of investing capital in the grape interest as a means of support; the vintage of 1870 seemed to correct, in a measure, what had been previously lost. The result was, faith increased—Last fall we had a very heavy crop, and, in many sections the frost destroyed whole crops of grapes, especially of the later kinds; some of the more favored sections along the Lakes matured to a good degree of ripeness. The early market opened quite satisfactory, but dropped until Isabella, Concord and many other varieties scarcely paid for boxes, expressage and commissions. Those who sold early feel well, those who sold late scarcely got pay for sending. The year before the late market was the best.

In view of this state of grape growing, what can be said? Can light be thrown on the almost dark picture? Some say, if you will plant the Rogers you will come out right. The question with me, is, is the quality of the fruit good enough? Another says, plant the Iona. The ready reply is that it won't grow, so it is of no use. Others say, Walter is the best. Most vineyard men will say that we have paid for high priced vines enough already.—The Croton is a splendid grape. It is a high priced grape too, and we don't know as it will bear transportation. The Rebecca is a good grape, but it is deficient in roots, and don't make a good growth once in fifty times without extra care and management, which is seldom ever given; in this section the Catawba is the principle grape about the Lakes. It seems to sell as a market grape equal to any red grape, and as a wine grape it is counted good by those that like a sour wine. The Catawba appears to be unreliable as a dependence, sometimes it proves too late, and is also subject to rot. The Delaware seems to stand the test so far remarkably well; it is set down as a first-class fruit grape, and a good wine grape. All are willing to say that the Delaware pays and pays handsomely. The Iona has been known to pay well; it will sell for a high price for its superior wine qualities. The Walter is thought to be one of the best, if not the very best wine grape. Good judges of wine and wine grapes say that the Iona and Walter grapes are marvelous wine grapes, making wine equal, if not superior, to the best foreign kinds. If we should give full credit to this statement, which I do not doubt, then we may fairly conclude that grape growing would be a business of large consequence.

In Europe the most of grapes ranges from ten cents to \$10 per gallon. You see that at such prices grapes should range from three-quarters of a cent to seventy-five cents per pound, which is a great range in price. I am aware that grapes of a very high quality are apt to be very feeble growers, producing light crops. If we admit this, then there will be room for a good and profitable business. I am informed that a gentleman at Canandaigua had thirty Rebecca vines set eight by eight feet, from which he picked, packed and sent to market last fall. After paying all expenses he received net, \$103.35, or \$3.44½ per vine. At that rate, say 650 vines per acre, the net receipts would be \$2,239.25

per acre. His Isabella grapes only paid for sending.

I noticed that California White grapes were quoted in New York market from thirty to forty cents per pound, during which time we were selling our best Catawbas for eight cents per pound in the same market. Can any of your many grape growers tell us grape growers who have Isabella and Catawba vineyards how to manage to obtain such prices? If we can make such wine, why should we be importing millions of dollars worth yearly? Why don't some of our capitalists look the question of wine making up? I am confident that wines of great excellence can be made from some of our best wine grapes, and it looks to me as if some way might be found to produce them, in quantities equal to the market demand. If this can be brought about, it seems to me that it will be safe to conclude that grape growing in this country will take the first rank in importance and value. More capital is needed, good and judicious selections of varieties are important. We have already flourishing wine cellars, but not half enough of them. It is plain to be seen that they are doing a very prosperous business. GRAPE GROWER.

Penn Yan, Feb. 13, 1872.

[The problem of success in grape culture for the future would seem to depend chiefly on the varieties cultivated. That most of the common varieties never will pay, is tolerably evident. That the choice varieties will pay abundantly, is equally evident. The Iona, the Walter and the Delaware are, and must remain, profitable grapes to raise.—The Iona, however, has the drawback of feeble growth on its own root; but experienced vineyardists declare, as the result of their best observation, that the Iona is twice as profitable as a graft, as it is on its own root. Grafting, therefore, is the key of success in the grape growing of the next few years. Abundant and excellent roots are already planted and well situated to produce the best quality of grapes, and of that quality that will always command the highest prices. The more sagacious of grape growers will, therefore, be wide awake to the necessities of the case. Let the poorer vines be grafted with grapes of choicest quality, and the business will inevitably succeed. What is true of the Iona, is, in a good degree, true of all the higher class of grapes. They have a degree of weakness on their own roots which is remedied by grafting.] —Yates County Chronicle, New York.

EFFECTS OF FROST ON PLANTS.—It has been a disputed question whether plants killed by frost die in freezing or thawing. That the former is the case, at least in some cases, has been satisfactorily demonstrated by Professor Goppert, of Breslau. The flowers of certain orchids, as, for example, the milk-white blossoms of *Calanthe veratrifolia*, produce indigo, but only by a chemical reaction that takes place upon the death of the parts. When they are crushed, or the vitality of the cells is otherwise destroyed, they turn blue at once. Now this change of color occurs immediately upon freezing, which proves that life then ceases. Certain other species are said to show the same thing,



### SUPER-PHOSPHATE OF LIME.

A correspondent of the *Rural New Yorker* asks about the conversion of bones into super-phosphate of lime. The Editor says:—Super-phosphate of lime is composed (if pure) of bones, bone dust, bone black, or the pure ashes of bones, with sulphuric acid added. In WARING's elements the following method of preparing it is given:

"The process of making it from whole bones is slow and troublesome, as it requires a long time for the effect to diffuse itself through the whole mass of a large bone. When it is made in this way, the bones should be *dry*, and the acid should be diluted in many times its bulk of water, and should be applied to the bones (which may be placed in a suitable cask, with a spigot at the bottom,) in quantities sufficient to cover them, about once in ten days; and at the end of that time, one-half of the liquid should be drawn off by the spigot. This liquid is a solution of super-phosphate of lime, containing sulphate of lime, and may be applied to the soil in a liquid form, or through the medium of a compost heap. The object of using so much water is to prevent an incrustation of sulphate of lime on the surfaces of the bones; this must be removed by stirring the mass, which allows the next application of acid to act directly on the phosphate remaining. The amount of acid required is about 50 or 60 lbs. to each 100 lbs. of bones. The gelatine will remain after the phosphate is all dissolved, and may be composted with muck, or plowed under the soil, where it will form ammonia.

*Bone dust* or *crushed bones*, may be much more easily changed to the desired condition, as the surface exposed is much greater, and the acid can act more generally throughout the whole mass. The amount of acid required is the same as in the other case, but it may be used *stronger*, two or three times its bulk of water being sufficient, if the bones are finely ground or crushed; more or less water should be used according to the fineness of the bones. The time occupied will also be much less, and the result of the operation will be in better condition for manure.

Bones may be made fine enough for this operation, either by grinding, etc., or by boiling under pressure, as previously described; indeed, by whatever method bones are pulverized, they should always be treated with sulphuric acid before being applied to the soil, as this will more than double their value for immediate use.

Bone-black is chiefly used by manufacturers of super-phosphate of lime, who treat it with acid the same as has been directed above, only that they grind the black very finely before applying the acid.

*Bone ashes*, or bones burned to whiteness, may

be similarly treated. Indeed, in all of the form of bones here described, the phosphate of lime remains unaltered, as it is indestructible by heat; the differences of composition are only in the admixture of organic constituents.

*The reason why super-phosphate of lime is so much better than phosphate*, may be easily explained. The phosphate is very slowly soluble in water, and consequently furnishes food to plants slowly. A piece of bone as large as a pea may lie in the soil for years without being all consumed; consequently, it will be years before its value is returned, and it pays no interest on its cost while lying there. The super-phosphate dissolves very rapidly and furnishes food for plants with equal facility; hence its much greater value as a manure."

### GRASS ON SANDY SOIL.

A correspondent of the *Rural New Yorker*, asks what kind of grass is best to sow on sandy soil, and is answered as follows:

That must depend upon condition. If sandy land has been properly enriched with vegetable matter—with leaf mould, muck or coarse manure—a mixture of Orchard grass, Red-tops, June grass, Red clover and White clover, equal parts, makes a good sod, and yields a good crop for both pasture and mowing. But if the soil is not rich in humus, we should (as we have) seed more heavily with red clover. The red clover roots, and the foliage which will fall, will help to enrich the soil and render it productive. If red clover alone were sown first and plowed under in June or July, about the time it is in blossom or just before, and then a mixture such as we have sown, a better permanent grass land would, in our judgment, be secured.

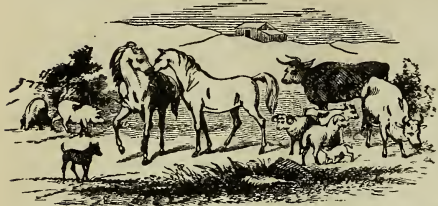
Since writing the foregoing, we find that FLINT in his "Grasses and Forage Plants" recommends the following mixture for mowing on light lands: Orchard grass, 4 lbs; June grass, 3 lbs; Hard fescue, 3 lbs; Fall Oat grass, 3 lbs; Meadow Soft grass, 3 lbs; Red-tops, 3 lbs; Italian Rye grass, 4 lbs; Red fescue, 2 lbs; Perennial Rye grass, 6 lbs.; English, bent, 2 lbs.; Perennial Red clover, 3 lbs.; Black medic, 2 lbs; White clover, 4 lbs.; Sainfoin, 2 lbs.

There is nothing to be said against this mixture. The greater the variety of nutritious grasses the farmer can get established in his soil the better, and the more enduring and productive will the pasture or meadow be, if it is properly fed and taken care of.

A writer in the *Practical Farmer* says that he finds the sugar beet very good to fatten his hogs with.—He begins with the beets and finishes off on corn. As the result of his experience, he found that his hogs fattened earlier, with a material saving of corn.



## Live Stock Register.



### STOCK RAISING IN THE SOUTH.

In reference to this question, the *Live Stock Journal* makes the following remarks:

"This question seems to be profoundly agitating the Southern agricultural mind, and we are sorry to see many of the most intelligent Southern editors—men who speak from an intimate knowledge of the South and its resources—disposed to answer it with a scarcely qualified negative."

If the South be not a live stock country, it must be from some defect in climate, or soil, or products, or markets. Let us examine these several particulars, as the subject is of great importance to us.—Our expenditures for hogs, mules, horses and cattle, annually, are fearfully great. They absorb a very large proportion of the results of the cotton crop. The sum thus expended is to be counted by millions upon millions of dollars annually. If we can save this sum, we shall be by so much the richer, and our lands will be by so much the better. If, however, there be inherent and irremovable impediments in our way, we should know it, and cease fruitless attempts to reach an unattainable result.

Is there anything in our climate unfavorable to stock raising? If there be, it is certainly not in our winter climate, which is mild and pleasant—so mild, that, except in the mountainous portions of the South, live stock do not need protection in winter, if in the range, or if in enclosed pastures, with woods in them. If kept in yards, they do need protection in bad weather. As a certain amount of food is necessary to keep up animal heat, a less amount of food is necessary at the South in winter, than in the extreme cold of the North. So far, stock raising is, therefore, cheaper at the South than at the North. We have before referred to the fact that we exhibited, some years since, at our State Fair, five three year old Ayrshire heifers, from stock bought in Scotland, of our own selection, which had never been housed for a single night, which had never been fed, living entirely upon pasture, winter and summer, and which had never cost one cent, except their salt, and the interest upon the land on which they grazed. These heifers would have been considered a fair average in Scotland. They were raised, not upon the warm coast, or even the middle cotton belt, but in Bartow county, more than three hundred miles from the sea, at an elevation of one thousand feet above it, and in what is called the cold section of the State.

It may be said granting that the winter climate of the South is favorable to stock-raising, the summer climate is unfavorable. To certain kinds of stock, it is unfavorable. Very large cattle,

as the Durham, very large horses, and the large breeds of long-wooled sheep, suffer from the heat. The large breeds of white hogs suffer from the mange. Whether this is an effect of climate or not, we do not know. But the medium sized breeds of cattle, horses, sheep and hogs, when proper care is taken of them, thrive as well in our climate as in any with which we are familiar—this familiarity includes both the Northern and European climates. A Devon, Ayrshire or Alderney cow, a thorough-bred or Morgan horse, a Merino sheep, and a Berkshire or Essex hog, with proper treatment, will thrive as well in the south as in any part of the world. Two classes of these animals seem to find their natural "habitat" in the South—the one the thorough-bred horse, the other the Merino sheep—the one snuffing the sweet South wind, redolent of spices from "Araby the blest;" the other rejoicing in the same fervent sun which shines upon Arragon and Castile. The source from which this vast country should derive its supply of these two classes of animals, more ancient in their pedigrees than the date of the birth of Mahomet, or the reign of the Moors, should be from the Southern States.

It has been debated, from time immemorial, among breeders, whether it is most profitable to raise large or small animals—whether it requires more food to raise one animal of a given weight of a large kind, than two to the same weight of a smaller kind—whether it costs more to raise two Merino wethers, weighing one hundred pounds each, than one Cotswold wether, weighing two hundred pounds.

In this unsettled condition of the question, we conclude that we have the right to say that the climate, which is not adverse to the rearing of the middle-sized domestic animals, is not unsuitable to profitable stock raising.

Thirty years since, we removed from Baldwin county, in Middle Georgia, then to Cass, now Bartow county, mainly with a view to sheep raising. This long experience has convinced us that we were guilty of great error. With our present knowledge, we should have removed to a point as far south in the State as would be consistent with health. It is a deal cheaper to provide, so far as live-stock is concerned, against a hot summer than a hard winter. In the one case benignant nature gives us trees without cost; in the other, Pennsylvania barns make a large demand upon the pocket. There is nothing in the Southern climate—taken as a whole, including the advantage of winter as well as the drawback of summer, adverse to successful and lucrative rearing of the several kinds of live-stock most useful to man.

Is there anything in the soil? We have every conceivable variety of it—mountain and valley, hill and dale; every variety of geological formation—tertiary, cretaceous, secondary and primitive. We would not put heavy cattle upon our thin mountains, or sheep upon our fat rice fields; but the mountains would be very good for the sheep, and the rice fields for the cattle. In short, we have varieties of soils and exposures suited to every variety of live stock.

Is there any deficiency in the products of the soil? The food for live stock consists of the grains, the grasses for hay, and pasture and root crops.

As to the grains, at the South, the products per acre have been ordinarily moderate, except on rich bottom lands. The capacity of the soil for the production of the cereals, with good manuring and

skillful culture, has been proved to be equal to that of any portion of the United States. In fact the largest corn product on record, is that of Dr. Parker, near Charleston, S. C.

As to hay, we will venture the following assertion: We may select an acre of the best timothy and clover meadow in New York or Ohio, and at the same time an acre of upland in Middle Georgia, properly prepared and well set in lucerne, and the product of the Georgia acre will be superior in quality of hay and fully double the quantity of the New York or Ohio acre. This assertion is made with a full knowledge of the capacities of both. Thus far the North has been unable to grow lucerne, successfully. Besides, lucerne, clover, timothy and herd's grass grow perfectly well at the South, in most localities where the ground has been sufficiently manured—the exceptions are our very sandy lands.

The artificial grasses are injured by our summer's suns. Blue grass and white clover, for instance, which are green during autumn, winter and spring, almost disappear in a drouth in August; the fall rains, however, revive them. Our loss at mid-summer is more than compensated by our gain in winter. After grain harvest we have the crab grass, which abundantly supplies this gap. So far as good pasture is concerned, we have more of it, including winter and summer, than sections north of us, which are considered to be well adapted to stock raising. We are decidedly of opinion that it is in our power at the South, with proper preparation to raise a horse or mule colt, a calf or a sheep, at one-half the necessary cost at any point north of Virginia. We do not include hogs, because they require so much grain and it requires labor to make grain.

The market it would be impossible to glut. If the whole South should abandon cotton and devote itself to raising cattle, of course there would soon be an excess. But the South will never abandon cotton. It would be a folly for it to do so. But if in connection with cotton it should devote a reasonable attention to stock raising, there would be no trouble in disposing of the surplus, after supplying our own wants.

The difficulty in stock raising at the South, is not in the climate or soil, or products or markets, but in the *habits of the people*.

At the North it is considered a tolerable profit, in pasturing live stock if, after all expenses are paid, the manure is left clear. Before the war manure was no object to us. When a piece of land was worn out, we could clear some more land or move West, the negro being our capital. The mass of planters preferred putting their horse-lots on a hill-side, so that the rain might keep them clean. Now we, in this one State of Georgia, have paid \$10,000-000 for fertilizers in one year. What a change! A large portion of this amount might have been saved by a judicious system of stock raising.

The live stock on a plantation have usually been regarded as a mere incident of it. We needed some butter and milk, some wool, many raised their own pork, and a few some fine colts for a fancy. But there was no such thing as raising stock for profit, as we raised cotton. It was not a business. Our live stock were therefore, usually much neglected. And this neglect has caused the impression that the South is not a live stock country.

Let a man, whose business it has been, in a cold-er climate, to raise live stock, come out to the South

and take hold a Southern plantation, and bestow upon his stock the same care to which he has been accustomed, and he will be amazed at the difference in favor of the South.

It is impossible to discuss this subject fully in a single newspaper article. It must receive continued reference, elucidation and discussion. We must adopt a mixed husbandry. While cotton will be and ought to be our leading market crop, there are other branches of farm labor which are as essential to really successful cotton culture (which involves the steady improvement of the soil,) as the sills of a house are necessary to the superstructure. We must not only grow the grains and the grasses, but also sufficient live stock to supply our wants and the Southern market.

In reviewing what we have written, we find that we have omitted to say anything of root crops for stock. In regard to one of them, we have space only to say that the turnip can be folded or fed off on the ground with sheep at the South, according to the English practice; an advantage impossible in a country in which the ground remains frozen during the winter. If the South be not a stock country we can see no reason for it.—*Plantation*.

## USEFUL RECIPES.

**THUMPS IN SWINE.**—The thumps is a sort of palpitation, caused by suffocation of the lungs, which arises either from being kept in damp, foul air, or by the hogs overlying the pigs, by piling upon each other in close beds. If the beds be in fine dust, as hog beds are apt to be, it is an aggravation of the trouble. As to a remedy, prevention is the only sure cure, by furnishing comfortable quarters in clean bedding and plenty of room. After the Thumps have fairly set in, there is little hope of saving the pig, but it can sometimes be done by placing the animals so affected, in comfortable quarters by themselves, and feeding them on corn meal wet with milk, and pretty well dosed with sulphur.

**SPINE EVIL IN COWS.**—Give a heaping table-spoonful of pulverized copperas once a day for three days. I usually mix it with flour and molasses, and work it into a ball.—When I administer it, I take hold of the tongue with one hand, draw it out, and with the other throw the ball down to the root of the tongue, and then as the patient draws the tongue back, the animal will swallow it.

**FOUL CLAW.**—Wash the sore feet with brine as strong as could be made of the best dairy salt dissolved in boiling water. After washing twice each day for two or three successive days, in order to cleanse the sores thoroughly, cover the sores thoroughly with pitch tar, and the sore will soon be well, and the cow come to her usual mess of milk again.

**INTERFERING IN HORSES.**—To prevent interfering in a horse who is turned out in the front feet, the shoe should be applied to fit closely on the inside, and the nails applied around the toe and to the outside. In some instances a small piece of leather placed betwixt the sole and the shoe, and allowed to project outwards, has a very good effect in preventing interfering.

**GRAVELED HORSES.**—Give two-thirds of a table-spoonful of saltpetre in a little salt, for three consecutive days; or take a pint of water melon seed, and boil in two quarts of water, till reduced to nearly one-half, and drench two mornings in succession; your horse will be cured.—*From American Stock Journal*.

**SOFT SHELLED EGGS.**—Give the hens plenty of lime, powdered oyster or clam shells, finely pounded bones, or marble dust, mixed with their feed.



# THE MARYLAND FARMER,

A STANDARD MAGAZINE.

EZRA WHITMAN,  
Proprietor.

Col. S. SANDS MILLS,  
Conducting Editor.  
Col. W. W. W. BOWIE,  
Associate Editor.

OFFICE—145 WEST PRATT STREET,  
Opposite Maltby House,  
BALTIMORE.

## Special Contributors for 1872.

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BALTIMORE, APRIL 1, 1872.

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\$12.00.

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**Maryland State Agricultural and Mechanical Association.**—The Rooms of the Society for the present are located at the corner of Charles and Lexington streets, Baltimore, where Farmers and Planters of this and other States are cordially invited to call whenever they may visit the city.

GEO. S. BROWN, *President.*

D. C. TRIMBLE, *Gen'l Secy.*

**Errata.**—In the March number, page 66, article, "Diseases of Cattle in the United States," 20th line, 2d column, read "cryptogamic," instead of *coyptoganic*. Also, same article, 15th line from bottom, read *track* for *tract*.

In the March number, page 76, "Pumpkins and Turnips with Corn," the following errors occur: On last line first column, for "length," read "width," and in second line, second column, for "X," read "1X."

## RE-ORGANIZATION.

The undersigned, having retired from the active duties of the old firm of E. WHITMAN & SONS, proposes to assume an active participation in the business management of the *Maryland Farmer*, an old standard agricultural and horticultural magazine, of which he was one of its founders, and been intimately connected since its first issue. The general administration of *The Farmer* will remain as heretofore, as we propose only to lighten the labors of those engaged in conducting the literary department by assisting in the business management of the concern. We flatter ourselves that our efforts in the past have added measurably to the agricultural prosperity of our own and surrounding States, by the introduction of the most improved and approved implements and machinery, as their needs were suggested by the progressive development of enlightened agriculture and its kindred sciences.—In making this announcement we appeal to the farmer and planter, and all engaged in rural labors of every character, to extend to us that encouragement which we believe our efforts will deserve, pledging ourselves to be up with the times, with an active sympathy in the welfare of all interested in agricultural knowledge and progress.

Further to ensure the ends we aim at, we announce to our readers, and feel sure it will be to them a source of gratification, that we have secured the services of Col. W. W. W. BOWIE upon our editorial staff. In future, his talent and much of his time will be devoted to the full accomplishment of our desire to make our journal, what we have ever earnestly desired it to be, a first-class, if not the leading agricultural monthly, in the country. No expense or exertion shall be spared to attain our object.—The agriculturists of this State, and elsewhere, are too familiar with the eminent abilities of Col. Bowie, both as a speaker and writer upon agriculture, and also his practical as well as theoretic knowledge on the subject, for us to indulge in a complimentary introduction of this gentleman to our readers, and we are sure such a course would be very distasteful to him. But we nevertheless feel confident that our friends, both gentlemen and ladies, planters and farmers, and everyone who feels an interest in rural pursuits, will manifest their pleasure at this announcement by adding in large numbers to our list of subscribers, and thereby enabling us to still further increase the worth of the *Maryland Farmer*.

Among the many improvements we have in view will be a pleasant chat by "*Patuxent Planter*," with the ladies, upon domestic economy, flowers, ornamentation of grounds and houses, &c., &c.—We shall steadily press upon our practical farmers to give us condensed reports of their farming ope-



rations and experiments, until we succeed in being able, by their help, to give monthly a fair reflex of the state of the crops, and actual condition of agriculture in the entire region embraced by our correspondents. This will prove a very interesting and instructive feature of our programme. And as soon as our arrangements can be perfected we shall embellish our columns with the best illustrations of the subjects and objects which from time to time may be discussed.

E. WHITMAN,

Proprietor.

#### A CARD.

As will be perceived by the above announcement, the undersigned has changed somewhat his business relations with this magazine, and takes this occasion to return his thanks to the patrons of the *Maryland Farmer*, and to a host of friends in this and the Southern States, for their support in the past, and at the same time express the hope of a continuance for the future.

Under the present arrangement he will be enabled to bestow more time and attention to the requirements of such a journal, and hopes that its future success will be commensurate with his hopes and determination to make it acceptable to a discerning public.

S. SANDS MILLS,

Conducting Editor.

#### A CARD.

The force of circumstances requiring my abandonment of farming, and seeking in Baltimore employment as a lawyer, yet with a strong love for agriculture, and feeling a deep interest in its progress, I have accepted an Editorial Chair in the office of the *Maryland Farmer*, as will be seen by the above card of the proprietor. This will not interfere with my professional engagements, but materially aid me in securing a livelihood.

I trust it will not be deemed improper if I appeal earnestly to my numerous friends throughout the State to sustain me in my new avocation. In days of "old lang syne" I enjoyed the most agreeable association with the hundreds of intelligent and genial gentlemen farmers at the annual meetings of the old State Society, many of whom have "rested from their labors," but have left worthy representatives, and to them and to such of those old friends still living, who have been the standard-bearers of our noble cause, I especially appeal for sympathy and aid in support of my efforts in my present honorable pursuit, that I may be the better able to promote by my pen the prosperity of that great interest on which rests securely and on which is dependent every other pursuit of man. Any efforts on the part of my friends in getting up lists of subscribers will command the sincere gratitude of their humble servant,

W. W. W. BOWIE.

Office *Maryland Farmer*, 145 W. Pratt St., Balto.

#### PUBLISHER'S NOTES.

**To Help the Farmer**—Show the Magazine to your friends, and talk about it as you mingle with them—show them a copy when opportunity offers, and induce them to subscribe. Let every reader act as an Agent in securing subscriptions for us, and thus help on the good work.

**For One Dollar and Fifty Cents**, 1 copy a year.

**For Five Dollars**—We will send 5 copies for one year of the *Maryland Farmer*—they need not all be to one address, or one post office.

**For Ten Dollars**—We will send 11 copies of the *Farmer* for one year and to as many post offices.

**For Fifteen Dollars**—We will send 18 copies.

**For Twenty Dollars**—We will send 25 copies to as many subscribers for the year.

The above liberal terms will enable our friends to make an effort to secure us this year 10,000 additional names. We will furnish *sample copies free* to all who wish to get up lists.

**Agents for the Farmer**.—Good active agents are wanted at every Postoffice in the country, to take subscriptions for the *Maryland Farmer*, to whom a liberal commission will be allowed.

Where single copies are now taken we would request the subscriber to act as agent or secure the services of the Postmaster or some competent person to act for us. Where farmers club together to the number of five and upwards, the magazine will be furnished at \$1 per annum for each subscription. Will our friends serve us?

**To Advertisers**.—The *MARYLAND FARMER* with a large and increasing circulation throughout the country, offers to business men peculiar advantages as a medium of advertising.

**To Postmasters and Others**.—We offer as an inducement to postmasters and others to solicit subscribers to the *MARYLAND FARMER* *fifty cents* on each subscriber sent—being \$1 per annum.

Always give the name of your **Post Office** and **State**, at the heading of your letter, and in legible characters.

**Specimens**.—Specimen copies of the *Maryland Farmer* sent **FREE** to any address.

#### THANKS.

We cannot resist the temptation to return our thanks to our many friends for the interest manifested in the extension of our circulation since the beginning of the new volume for 1872. The large addition of our list is indeed flattering, and as an evidence of our high appreciation of the kindness of our friends, we appeal to the contents of the four numbers of the present year, for we have spared no expense or labor to make the *Farmer* acceptable to every old and new reader. May we ask them to continue their efforts in that direction; and thereby serve us and add their mite to the noble cause in which we are all engaged. We still continue to supply *clubs of five and upwards*, at \$1 each—making the *Maryland Farmer* the best and cheapest agricultural magazine in the country. Are we saying too much for our journal? We appeal to our constant readers, who ought to be the best judges,

## TWO MORE GUNS FOR THE DOG TAX.

The first is from our neighbor the *Towsontown Union*, from whose columns the following article is taken. Our constant readers will remember that the *Maryland Farmer* has taken advanced ground in regard to this question, advocating a law not only for a few counties but for the whole State, as in our judgment, the law, to secure the results deserved by the friends of agricultural progress, should extend over all the State; and as each county, according to a law laid before the Speaker of the House, Hon. A. J. Gorman of Howard, by a gentleman of Howard, would be left to execute its provisions within and by itself, the friends of the measure could supervise their prompt enforcement.

In regard to the friends of the measure, we will candidly say, after many years agitation of the subject in press, convention and conversation, that we have always found them to comprise the most honorable, respected and influential members of the community; but the causes operating to prevent organized union among the agricultural classes, have also prevented that uniform action of the friends of the measure over all the State, which is essential to success, and we will remark here that if the farmers of the State desire to remove the many burdens under which they unnecessarily labor, burdens which no other class would long tolerate, the path and the only path which can lead to success is that of systematic organized combination, operating through a STATE FARMERS' SOCIETY, with well supported county societies and well attended District Clubs, for the redress of those grievances by a peremptory demand for their removal, backed by the action and votes of our yeomanry.

It is as true in regard to social as well as national evils that—

"who would be free,  
themselves must strike the blow,"

and

"the willing limbs of dull submission  
Have done far more to weld the despot's chains  
Than all the despot's power."

The farmers tyrant is his own neglect of the only means by which success may be obtained.

We subjoin the article referred to.

## SHOULD NOT TAX-PAYERS HAVE SOME PROTECTION.

As the session of the Legislature is near at hand, it is proper that a memorial should be at once prepared, praying for the passage of a general stock law to apply to all the counties of the State, for the protection and promotion of the farming interests:

First, with regard to sheep culture, and encouragement to that important branch of husbandry. Under proper protective laws, such as are in force in some other States, and indeed in some counties of this State, with their beneficial results, farmers throughout this State, without the timidity and unwillingness to take the risk, that now exists—would doubtless, enter readily and largely into the

production and growth of improved breeds, thereby causing increased wealth in the State, and an addition to the taxable basis.

The Lord Chancellor of England sits upon a wool-sack, illustrative of the cherished regard he had for the great staple of that nation. Under the fostering care of wholesome laws, sheep husbandry is the highest agricultural industry of that country, and with progressive improvement in breeding, perfection in weight of the animal and wool product, is everywhere attained. When shall our State of Maryland show, everywhere, over all its length and breadth, in Cotswolds, Bakewells, or Southdowns, drawing down two hundred pounds with twelve to fourteen pounds clips, instead of scarred scalwags of sixty or seventy pounds weight, and two or three pounds of burry wool covering their bones? The answer is easy. Let restrictive laws be made and enforced, to guard flocks from depredation, and farmers will soon know their best interests in having folds of profit producing stock. Superior mutton, comparing favorably with that of Old England, will grace our markets, and a saddle of the finest sort, at moderate prices, may be enjoyed by every house-keeper in the land.

Secondly. For the further benefit of the agriculturists of the State, the legislature should be memorialized for the passage of a law, prohibiting the running at large of stock of all kinds, in all sections of the State. Almost every tax-payer in the rural districts of Maryland, is a proprietor or tenant of land, and rarely laws should be made to protect and guard the interests of those who work to pay these taxes. The fence is an American institution and habit, and a costly one it is. Illinois is said to have ten times the fencing of Germany. Dutchess county, New York, more than all France. A narrow path serves to divide farms in France, Germany and Holland. In South Carolina the improved land is estimated to be worth \$20,000,000, and the fences have cost \$11,000,000. The annual repair is a tenth of this. A recent calculation places the cost of fences in the United States at 1,300,000,000. Nicholas Biddle, thirty years ago, said the Pennsylvania fences had cost \$100,000,000. In Ohio they are put at \$115,000,000, and in New York at \$144,000,000. The cost of fencing the 2500 miles of public roads, alone, in Baltimore county, would be, at \$1 per pannel, \$2,520,000. From this, may be calculated the enormous sum required for fences over the whole State; and the annual repair is nearly a tenth of this sum. The National Government, State, and municipal taxes combined, are far from being equal to the interest of the money expended for the single purpose of fences, which expense, to guard against the trespassing of vagrant stock, could, for the most part, be avoided by a salutary law, obliging all owners to keep their stock within their own bounds; and best experience tells us, a much greater profit and advantage would be assured to them, under the system of home inclosure.

Some of these days, under careful tillage of our very progressive people, fences will disappear entirely, and land boundaries will be marked with fruit and shade trees, or neat hedge-rows, and the country will present a much improved appearance.

PLAIN FARMER.

The other gun is from the Baltimore county (Gunpowder) Farmer's Club, held at the residence of Talbot Gorsuch, Esq., on the 8th January, "at which it was unanimously resolved to memorialize the Legislature



to pass a suitable law to protect sheep breeders from the ravages of dogs, and the secretary was directed to forward to the Baltimore county delegation in the Legislature, a request to use their influence to secure the passage of a law, giving to their county all the benefits of any act that may be adopted at its present session. It is to be hoped that other clubs of influential farmers in districts where there are no clubs in Baltimore and other counties, will lose no time in urging upon their delegation to secure the passage of a general law upon the subject, or at least to have their counties named in any special act which may come before the Legislature."

Farmers of Maryland, will you organize for action? Every other calling is doing so and your vocation will be left behind, unless the means are made use of to secure success.

### CURRENTS AND GOOSEBERRIES.

ALLEN'S FRESH, Md., March 12th, 1872.

When is the best time for planting currant and gooseberry bushes? Will they degenerate by being set side by side? How do they sell in market? What kind succeeds best in this State?

A SUBSCRIBER.

In reply to the above questions from "A Subscriber," we answer:

1. It is not yet too late to plant, and is really a good time, if not the best, so the work be done by the 20th inst.

2. Proximity of these plants to each other, will never cause degeneracy.

3. The price is in accord with the demand and quality of the fruit; good fruit, in good order, always commands fair remunerating prices.

4. The American Seedling and Houghton's Seedling, Gooseberries, and of Currants, the old Red Dutch, and the Cherry for the red sorts; White Grape for the white sorts, and Black Naples for black sorts, are the kinds best suited for growing in this State.

### Absorbents for the Stable.

A correspondent sends us the following on this subject:

"You extract a useful article from the *Country Gentleman*, on 'Absorbents for the Stable.' Several articles for this purpose are enumerated—but another equally good and useful substance is not named—*leaf mold and rubbish*, from the forests and lanes. I have, from experience and observation, found it to be excellent—absorbing readily the liquid, making a very pleasant bedding for horses and other stock, and furnishing a most friendly and fertilizing compost for all crops, particularly for the orchard and small fruit, while it is inexpensive, and otherwise—if not thus used—nearly goes to waste. I only throw out the suggestion, as it occurred to me, when reading the article."

**Maryland State Agricultural and Mechanical Association.**—*Meeting of the Executive Committee—Election of President.*—The Executive Committee of the State Society held their regular quarterly meeting at their rooms, corner of Charles and Lexington streets, in this city, on Tuesday, March 6th, last—present Geo. S. Brown, in the chair, J. L. Johnston, J. Howard McHenry, R. F. Maynard, Jesse Slingsluff, H. O. Devries, B. H. Waring and W. S. G. Baker.

The report of the General Secretary and Treasurer was read and approved.

A communication was received from Mr. Joseph H. Rieinan resigning the presidency of the association on the ground that his business would not permit him to give the necessary attention to the duties of the office. The resignation was received with reluctance, but as he had expressed his intention of resigning some time since, it was accepted.

Mr. H. O. Devries nominated Mr. George S. Brown for president, who was unanimously elected. Mr. Joseph H. Rieinan was then elected chairman of the executive committee, to fill the vacancy occasioned by the election of Mr. Brown as president.

The desire was expressed by different members of the committee to bring about a greater unanimity of action on the part of the State and county societies, and to further this object the society was requested to communicate with the officers of the different county societies as to the time of holding their next annual meetings, and, if possible, to make such arrangements as will enable the State society to hold their exhibition at such a time as will not conflict with the meeting of the county societies.

It is the intention of the society to have agricultural papers and periodicals on file at their rooms; to solicit samples of wheat, corn, tobacco and other agricultural productions from the farmers of the State, to be placed on the exhibition tables of the society; to obtain from the different counties of the State the character of their soil, and what lands are for sale in those counties, so that in a measure the society and the Immigration Society may be able to give such definite information to settlers as will induce them at least to consider the advantages our State offers as to soil and climate before they turn their attention elsewhere; and the society invite in this matter the hearty co-operation of the agriculturists of the State.

**Agricultural and Mechanical Society of Allegany County and West Virginia and Pennsylvania.**—The fourth annual meeting of this Society was held in Cumberland, on the 12th March, when the following officers were elected for the ensuing year:

*President*—S. P. Smith; *Vice-President*, D. C. Bruce; *Assistant Vice-Presidents*, J. M. Schley, George Washington, Wright Welton, Abraham Johnson, J. A. Humbird, Alex. King, A. B. McCarty, James Wilson, John M. Buchanan, N. A. Frost, William Logsdon, A. C. Greene, Geo. A. Pearre, Edw. Manley, H. G. Davis, A. J. Wilson; *Treasurer*, Dr. J. J. Bruce; *Recording Secretary*, W. H. Lowdermilk; *Corresponding Secretary*, C. C. Shriver; *Board of Managers*, F. R. Seymour, Geo. S. Rizer, R. D. Johnson, Geo. Henderson, Jr., Will H. Lowdermilk, Joseph Dilley, Jacob Brengle, R. L. Gross, Thomas B. Davis, John C. Brady, C. C. Shriver, Asa Williamson, Hopewell Hebb, J. J. Bruce, J. B. H. Campbell.

**Back Numbers of the Farmer.**—The repeated demand for back numbers of the *Farmer*, prompts us to give notice that our supply is exhausted. Those who have ordered back full sets of the *Farmer* will therefore understand why they are not sent. There are many odd numbers on hand that we will cheerfully supply without charge to those who have mislaid them.

**Harder's Thresher and Thresher and Cleaner.** We call attention to the advertisement of Minard Harder, of Cobleskill, New York, who offers for sale the celebrated New York Premium Thresher and Cleaner.



## Our Agricultural Calendar.

### FARM WORK FOR APRIL.

With April comes frequent showers and soft airs and bursts of sunshine, and the springing of grasses and the tender green of the young foliage. In ordinary seasons there is just that degree of warmth in the soil, and just that amount of moisture which are best adapted to promote the germination of seed. It is in the country a month of earnest and unremitting labor. March may have proved cold and backward. Indeed, in this latitude it has already proven so, and the work which should have been done in March—the seeding of oats, the planting of early potatoes, and forwarding of early vegetables in the garden—may and in all probability will have to be crowded into April. It therefore promises to be a busy and a trying month; for the cattle will have to be kept in the yard to be fed on dry fodder later than usual, and the press of farm work will also be greater than usual. There is, moreover, no more serious danger to the farmer than the loss of the proper season for ploughing and planting. The spring crops thrive best when they take root and are well advanced, before the heat and the drought of the summer come on. But there is no ordering of these things, and any irregularities in the process of the seasons must be made up by strenuous work and skillful tillage. The work proper to the month is as follows:

#### Seeding of Oats.

It is quite probable that the backwardness of the season may have prevented the seeding of oats in this State, except in favored localities and in light soils. What therefore is usually done in March must now be done promptly and as early as possible. [For suggestions as to preparation and tillage see the *Farmer* of last month.]

#### Lucerne.

We do not know whether it is worth while to go into any extended remarks on the cultivation of lucerne. It has never been a favorite crop with our farmers, and even where attempts have been made to grow this fine forage plant, it has but too often been neglected after standing a year or two and suffered to run to weeds. We have noticed, moreover, a disposition to avoid the cultivation of any crop which requires not only careful preparation and tillage, but also patient waiting for two years before it is fit to cut. Now, the young plants of lucerne requires to be kept very free of weeds during the first year, and will not thrive well except on a rich soil. They cannot be cut for green forage during the first season, but may be cut more than once the second. After the second year and

for several years afterwards, they will need only such cultivation as will keep the soil light and free of weeds, and when once thoroughly established the product per acre is very large.

*Soil for Lucerne.*—The best soil for lucerne is a light sandy loam. It should be dry and fertile, and should be ploughed thoroughly and deeply.

*Mode of Culture.*—By some European farmers lucerne is seeded broadcast, but the best method is to sow the seed in drills at a distance of a foot apart. As soon as the plants are well up they should be carefully weeded, and kept clean throughout the season with the hoe. The following season they should be hoed and weeded the same as the previous year, after which they will cover the ground and so keep down the weeds.

*Time of Cutting.*—For green forage, lucerne may be cut whenever the growth is sufficiently advanced. For hay, it should be cut when in flower.

*Quantity of Seed to the Acre.*—If broadcasted, sow 20 lbs. of seed to the acre. If drilled, 15 lbs. will be sufficient.

#### Sowing Clover Seed.

Where the seeding of clover has been delayed for unavoidable causes, go to work at once and broadcast it in among the winter grain, following the seeding with a light harrow, and immediately thereafter with the roller. If oats and barley are both yet to be seeded, the seeding of clover follows as a matter of course.

#### Barley.

There is very little barley grown south of Mason's & Dixon's line. It seems to flourish better to the northward, and our farmers have for the most part thrown it out entirely from their system of cropping, although in good seasons and on fertile soils the produce is large and the price at which the grain now sells makes its cultivation profitable.—To those who desire to try what they can do with barley, which may be seeded to advantage later in the season than the oat, we may remark that the best soil is rich, dry, sandy loam, and that where the soil is not rich, either of the following mixtures will be found surviceable if applied to each acre so seeded.

No. 1.—10 two-horse loads of marsh muck or woods earth; 5 two-horse loads of stable manure; 10 bushels of wood ashes; compost the above for two weeks, and after fermentation break down, mix, spread broadcast and plow under.

No. 2.—250 lbs. of ammoniated phosphate of lime; 10 bushels of unleached wood ashes; broadcast and plough in.

No. 3.—10 bushels of wood ashes; 10 bushels of bone dust; 2 bushels of coarse salt; 1 bushel of plaster; top dress and harrow in.

**Quantity of Seed to the Acre.**—Sow 2 bushels of seed to the acre. Harrow, cross harrow; and then sow a peck of clover to each acre; or better still, a peck of clover and a bushel of orchard grass, seeded separately. Bush in and roll.

#### Hide-Bound Meadows.

Run a sharp heavy harrow over meadows that have become hide-bound, first top-dressing each acre with 10 bushels of wood ashes, 1 cwt. of super-phosphate of lime and 1 bushel of plaster.

#### Hauling Out Manure.

Manure intended for the corn field should now be hauled out.

#### Potatoes.

Early potatoes if not already in the ground should be planted immediately. [For the preparation of the soil and mode of culture, see the *Farmer* for last month.]

#### Compost for Corn in the Hill.

A very good compost to be used in the hill for corn where manure is scarce, may be made as follows:

10 bushel of rich well rotted manure; 1 bushel of plaster; 1 cwt. of super-phosphate of lime. Mix thoroughly together and apply a small quantity to each hill at the time of planting.

#### Sugar Beets and Mangold Wurtzel.

Wherever large quantities of stock are kept, and especially where there are many milch cows, a full supply of one or both of these roots is indispensable. We prefer the sugar beet as most nutritious; but the mangold is hardy and with good cultivation is very productive. The soil for these roots should be rich and requires to be ploughed deeply. If mangolds are seeded, the addition of 5 bushels of salt to each acre planted will add largely to the product, but salt has no appreciable effect on the sugar beet.

#### Preparation of the Land.

Plough deep, harrow and cross harrow until the soil is made very fine and free of clods. Lay off the drills from 27 to 30 inches apart. Drop the seed thinly along the drills, cover with the back of a spade and finally roll all smooth. *Note.*—The sugar beet will thrive best on a sandy loam—the mangold wurtzel prefers a stronger admixture of clay in the soil.

**After Culture.**—As soon as the plants are large enough, dust them of a morning whilst the dew is on, with a mixture of soot, wood ashes and plaster. When the plants are four inches high, thin them out so as to stand about 12 inches apart in the rows, and with the spare plants fill in vacant spaces.—Keep them clean with the hand and the hoe. Two weeks later, run the cultivator between the rows and follow it up at intervals until the plants are well advanced.

**Quantity of Seed to the Acre.**—Three lbs. of seed to the acre will be sufficient. Before seeding, except in a drought, it is better to soak the seed for forty-eight hours in lukewarm water to hasten germination.

**Time of Seeding.**—As early as possible in April.

#### Parsnips, Carrots.

The soil and preparation is the same as for the sugar beet—as is also the after culture, and the time of seeding. The drill should be two feet apart and one inch deep and the quantity of seed to the acre about two pounds.

## Garden Work for April.

The work for the month in the Garden is as follows:

**Sowing Cabbage Seed.**—If the plants have not been forwarded in a hot-bed, choose now a warm border, manure it well with the richest and most completely rotted manure, dig the plot over deeply, and rake the soil until it is quite fine. Now sow in drills cabbage seeds of such variety as may be preferred. When the plants come up, water them occasionally of an evening, especially in dry weather, and if they are troubled with the fly, sprinkle soot or flour of sulphur.

**Setting Out Cabbage Plants.**—Cabbage plants which have been raised in a hot-bed, and rendered hardy by airing the bed, may now be set out.—Make the soil rich, for the cabbage is a gross feeder, and thrives best on strong, concentrated barnyard manure. Dig the ground over carefully—which should be of a loamy texture, and rather moist than dry. Rake all fine, and then, choosing a moist, cloudy day, set out the plants in rows running north and south, laying off the distances three feet by two and a half apart. If the weather at the time of planting should on the other hand prove dry, water the plants every evening after sunset until they take root, and shade them as much as possible.

**Siberian Kale.**—Prepare a bed early in the month, and sow Siberian kale seed for sprouts during the summer. A bed twenty feet square, if well manured, will give sufficient kale for a large family.

**Early Peas.**—Continue to drill in a few rows of early peas at intervals of ten days throughout the month.

**Beans.**—Plant dwarf beans, and follow up the planting at intervals of ten days.

**Lettuce.**—Plant out lettuce plants from the cold frames for heading, and sow lettuce seed every ten days for a further supply.

**Radishes.**—Sow radish seed at intervals of a week throughout the month.

**Spinach.**—Drill in a few rows of spinach seed.

**Carrots and Parsnips.**—Sow carrots and parsnips for a winter supply.

**Beets.**—Drill in beets for the general crop. See Farm Work, "Beets and Mangold Wurtzel," in this number.

**Sowing Onion Seed.**—Onions of good size may be grown from the seed in one season, if the seed be sown in rich and well prepared ground during the latter part of April.

**Celery.**—If celery plants have been raised in a hot-bed, they may now be pricked out into a nursery bed, three inches apart, where they may re-



main for the space of five weeks. After transplanting they will require frequent watering.

*Sowing Celery Seed.*—Prepare a bed about the middle of the month and sow celery seed.

*Salsify or Vegetable Oyster.*—Drill in the seeds of this palatable root. The soil best adapted to its culture is a sandy loam. It should be rich, deeply dug, and perfectly pulverized. Draw the drills ten inches apart, and one inch deep. Drill in the seed thickly, as many will not germinate. Cover them with the back of the rake, and press down the earth firmly. The after culture is precisely the same as that required for carrots, parsnips and beets.

*Parsley, Thyme, Sage, &c.*—The seeds of all these herbs may be sown during the early part of this month.

*Rhubarb or Pie Plant.*—Prepare a border having southern exposure, make the soil fine and rich, and sow seeds of the rhubarb or pie plant.

*Early Potatoes.*—Plant as early in the month as possible. Potatoes for early use should have been in the ground a month ago.

*Small Salading.*—Sow seeds of small salading at intervals of a week throughout the month.

*Nasturtiums.*—Drill in nasturtium seed for pickles.

*Red Peppers.*—Early in the month prepare a bed for red peppers, and sow the seed.

*Tomatoes and Egg Plants.*—Tomatoes and egg plants should be forwarded in a hot-bed, and for an early supply must be derived from that source. For later uses prepare a warm border and drill in a few rows of seed.

*Melons—Canteleupes*—Towards the close of the month prepare hills for the reception of melons and canteleupes. A bushel of well rotted manure will be required for each hill when the ground is poor. The soil best adapted to the melon is a light sandy loam. The distance of the hills apart should be six feet. For canteleupes make the hills four feet apart. Canteleupes will thrive well on heavier soil than melons.

*Strawberry Beds.*—Keep the strawberry beds clean of weeds, watering them frequently during dry weather. Do not be afraid of watering the plants, even in dry weather, provided it be after sunset. The best dressing for strawberries is woods' earth.

*Shrubbery.*—All kinds of shrubbery may be planted out early this month. The closing week in April is considered by some horticulturists the best time for planting evergreens.

**The Practical Farmer.**—The March number of this most excellent and substantial agricultural monthly is on our table. It is edited with judgment and ability, and possesses a corps of correspondents who are eminently practical men, discussing practical questions from the stand point of actual experience. The *Farmer* is thus rendered one of the very best journals of its class published, and is worthy of a large patronage. Price \$1 50 a year.—Paschall Morris & Knight, No. 18 N. 13th street, Phila.

## NATIONAL AGRICULTURAL ASSOCIATION.

We have received from the Secretary, J. B. Killebrew, Esq., of Nashville, Tenn., an "Address to the Agricultural Organizations in the United States, prepared by a committee in obedience to a resolution by the National Agricultural Association, together with Constitution and Proceedings." The National Agricultural Congress assembled in Nashville, Tenn., on October 3d last, and continued three days, transacting important business, looking to a permanent and more efficient organization.

The following is an extract from the address of the committee appointed to set forth the purposes of the association and to urge the speedy and earnest co-operation therewith of the various Agricultural Associations throughout the country.

"The need of some National Organization, representing the Agricultural interests of the United States, has long been felt by many thoughtful farmers in every section of the country, and from time to time, the expediency of forming such an organization has been suggested in public addresses and through the press. The first serious attempts to put this suggestion into practice, however, was made this year by the Tennessee Agricultural and Mechanic Association, and resulted in the assembling of a Congress, which met in Nashville, on the 3d day of October, 1871, and remained in session until 6th. It was composed of delegates from 11 States, representing more than 40 different Agricultural Societies and Associations. In the character of delegates, in earnest zeal and cordial good will, this first meeting was a complete success. The work was admirably begun—but only begun. It will not be, it cannot be, completed until every State and County Association in the Union is fully represented in, and in active working co-operation with, the Congress. To solicit this representation, and to secure this co-operation is the duty imposed upon the committee who now presume to address you. We assume the duty willingly, in the belief that a common aim and a common sympathy will cause you to lend a ready ear to our solicitations."

### Unity of Action Among Agriculturists.

The following paper has been issued by the President and Secretary, explanatory of the objects and purposes of the organization:

The duty of transacting the business of the National Agricultural Association *ad interim* devolves, by the Constitution, upon the President and Secretary. Our first and greatest duty, unquestionably, is to make known to the people throughout the length and breadth of our land the existence of such an organization; its purposes and objects; the time of meeting; the basis of representation and such other matters as may be of general interest to the farmers and agricultural associations throughout the United States. There is no method by which this can be done so effectually and so quickly as by and through the press; and we trust that we are not asking too much of it to aid us in an enterprise so praiseworthy, so patriotic, and fraught with possibilities for good so immense, wide-spread, and of such transcendent importance to the highest interests of the country.

Any improvement in the methods of agriculture guarantees an improvement in every other industrial pursuit. The business of agriculture lies at the foundation of all others, and unless the farmers are prosperous other classes can not be, for the material of art must of necessity be supplied by the production of nature. Any organization, therefore, that looks to an enlarged and progressive development of agricultural science and a diffusion of agricultural industry, is of general and permanent benefit to the entire country. The objects of the National Agricultural Association are:

1. To protect this leading industry from unjust discriminations in the legislation of the country. All other arts and trades have their organizations, and their voices are heeded in our legislative halls. The farmers of the country have no perfected national organization. Instead of joining their united energies to effect deliverance from those evils that have oftentimes sorely oppressed them, they have preferred to work singly, pulling in various and



often opposite directions; neutralizing the power of each other and producing a state of rest and inactivity by the exertion of equal and opposing forces. In this way they have in a large measure nullified their influence and importance. One of the leading objects of the Association is to centralize and consolidate this power, so that it may be used at any time that it may be necessary for the protection and defense of the pursuit of agriculture.

2. To collect and disseminate information pertaining to agriculture, and to act conjointly with, and as an assistant to, the Agricultural Department at Washington.

3. To awaken among farmers a class-spirit which induces co-operation and associated effort.

4. To dignify and popularize the business of agriculture, by showing its importance and usefulness to the country; by making it a desirable field for educated young men to enter; by holding forth its past history, its splendid promises, its many advantages, its independence, its liberalizing tendencies, its conservatism, its comparative freedom from failure and its healthful and invigorating influences.

5. To create unity of aims as well as concert of action in reference to those measures calculated to insure efficiency and to secure the development of this great national pursuit; also to consider questions affecting its commercial relations and the means of transportation, and to take such steps as may be necessary and proper to protect it against the influences of the great accumulations of capital in commercial centres, guarding it against the evils of such aggregated capital, against heartless speculators and great corporations.

#### BASIS OF REPRESENTATION.

The constitution provides that each State and Territory shall be entitled to *two* delegates, to be appointed by the State Agricultural Society or Association, if there be such an organization; if there is not, then the Governor of such State or Territory shall appoint its delegates.

Each Agricultural College in the United States, organized in conformity with the law of Congress of 1862, made for that purpose, shall be entitled to one representative.

That each regularly organized Agricultural Society, of fifty or more members, which shall have contributed to the funds of this National Organization, in proportion to their representatives, shall be entitled to one representative.

Delegates, in all cases, shall be active members of some agricultural organization; they shall present credentials under seal from their respective constituencies; their certificates shall state the bodies represented, and the number of members in each.

#### DUES.

At a meeting of the Executive Council of the National Association upon the adjournment of the convention, it was on motion, resolved that each agricultural organization in each State and Territory of the United States, upon the payment to the Treasurer of five dollars for the first fifty members, one dollar for each additional fifty members, or fractional part thereof, and such further contributions as they may deem proper, shall be regarded as constituent bodies of this Association, and shall be furnished with a copy of every publication or report emanating from this Association.

The present Treasurer is F. H. French, Nashville, Tenn., to whom remittances may be made by the various Agricultural Associations.

The next session will be held in St. Louis on the 4th Monday in May, 1872. We hope that every local organization in the United States will be represented. Essayists have been appointed, and it is expected that the occasion will be one of great interest to those engaged in agriculture. All who want more definite information can procure a copy of the constitution and proceedings, by addressing the Secretary at Nashville, Tenn.

F. JULIUS LEMOYNE, *President.*

J. B. KILLEBREW, *Secretary.*

**Officers of the National Agricultural Association, for 1872.**

#### PRESIDENT.

F. JULIUS LEMOYNE, Washington, Pennsylvania.

#### VICE-PRESIDENTS.

ENOCH ENSLEY, Memphis, Tennessee.

O. H. JONES, Atlanta, Georgia.

F. C. JOHNSON, New Albany, Indiana.

JOHN S. MARMADUKE, St. Louis, Missouri.

JOHN M. BILLUPS, Columbus, Mississippi.

GOV. E. EISENMEYER, Macomb, Illinois.

GOV. R. M. PATTON, Florence, Alabama.

ROBERT BROWDER, Olmstead, Kentucky.

DUNCAN F. KENNER, New Orleans, Louisiana.

GORDON N. PEAY, Little Rock, Arkansas.

Col. S. SANDS MILLS, Baltimore, Maryland.

Gen. JOHN FRAZER, Lawrence, Kansas.

J. M. SHAFFER, Fairfield, Iowa.

J. W. HOYTE, Madison, Wisconsin.

HENRY CLARK, Rutland, Vermont.

D. E. WILLARD, Oxford, New Hampshire.

H. N. McCALLISTER, Bellefonte, Pennsylvania.

Geo. GEDDES, New York.

D. C. RICHMOND, Sandusky, Ohio.

KEMP P. BATTLE, Raleigh, North Carolina.

J. N. HOAG, Sacramento, California.

IRA D. CROUSE, Hartland, Michigan.

Com. M. F. MAURY, Lexington, Virginia.

MARSHALL P. WILDER, Boston, Mass.

#### TREASURER.

F. H. FRENCH, Nashville, Tennessee.

#### SECRETARY.

J. B. KILLEBREW, Nashville, Tennessee.

### LAND SALES IN MARYLAND.

Below we give an account of land sales in Maryland since our March number, as far as has come to our knowledge:

#### Baltimore County.

Alexander Esler sold to J. B. Davis his lot and premises, situated in the first district of Baltimore county, on the road leading from the Frederick turnpike to the Union Cotton Mills, containing between five and six acres, for \$3,000.

#### Caroline County.

Mr. J. W. Bryant, trustee, sold a part of what is known as the "Butler" tract, containing 154 acres, near Smithville, in this county, for \$1,615; F. A. Porter & Bro. purchasers.

#### Frederick County.

Carlton H. Crone, trustee, sold the farm formerly owned by Conrad Crone, situated about three-fourths of a mile south of Middletown, and containing 101 acres, to Mr. John Sanner, at \$105.50 per acre.

John B. Musser's farm, situated two miles east of Frederick, at Hughes Ford, containing 229½ acres, has been sold to H. C. Brown, of Pennsylvania, for \$24,000.

Jacob Fox's farm of 68 acres and a 57½ acre wood lot, situated near Utica, eight miles north of Frederick, has been sold to Emanuel L. Ramsburg for \$6,200.

#### Harford County.

J. S. Richardson, auctioneer, sold the farm of the late Jas. Kean, situated near Forrest Hill, containing 140 acres of land; purchased by John C. Hanna, for \$4,000.

S. R. Gilbert, auctioneer, sold a tract of land, containing 86 acres, with fine improvements, situated near the Harford Furnace, to Wm. H. Marriott, of Baltimore, for \$4,500.

Mr. John S. Dallam, sold his farm, containing 115 acres of good land, on Thomas's Run, to Mrs. Skipwith H. Coale, of this county, for \$8,000.

#### Howard County.

Joshua B. Davis, sold his grist and saw mills and appurtenances, with three or four acres of land attached, located on "Bonny Branch," near Ilchester, in Howard county, to Alexander Esler, of Ilchester, for the sum of \$6,000.

#### Queen Anne's County.

Messrs. G. W. Spurry and C. Satterfield, of Caroline county, have purchased of Mr. Geo. W. Taylor, of Queen Anne's county, a valuable farm and timber land, containing 363 acres, for the sum of \$7,550. This land is located on the county road leading from Centreville to Church Hill.

#### Cecil County.

W. J. Jones, trustee, sold at private sale the real estate of the late Samuel S. Maffit, in Elk Neck, containing 463 acres, to Daniel Bratton, for \$12,000.

#### Prince George's County.

George C. Merrick, as trustee, disposed of a portion of the real estate of the late John Henry Waring, consisting of a tract of land situated in Nottingham district, called "Part of Brookfield," containing 175 acres. It was purchased by Dr. William W. Waring, at \$34.60 per acre.

#### Kent County.

The farm of Mr. Richard Peacock, near Galena, containing about 284 acres, was sold at public sale, and purchased by Andrew Woodall, Esq., for \$10,000 cash.

## Horticultural.

**Fruit Culture—Agencies Operating in the Atlantic States upon, and more especially, upon that of the Peach.**

BY G. EMERSON, M. D., OF PHILADELPHIA.

Read before the Convention of the American Pomological Society, at its session in Horticultural Hall, Philadelphia, in the Fall of 1869.

In the early settlement of our country, the peach tree seems to have been almost regardless of latitude, and to have perfected its fruit everywhere in the Eastern, Northern, and Middle States. But now the region in which it is found to flourish in the older settlements is comparatively limited.

The cause or causes which have brought about this change, have led to much discussion and diversity of opinion.

The peach, like its more tender congener, the almond, is a native of Persia, lying between the latitudes 30° to 40° north, and having a mild climate. In Northern Europe and in England this fruit can only be produced under artificial protection, under glass, or trained against walls having a southern exposure. In our own country, when the first clearings were made in the forests, the tree had the shelter afforded by surrounding woods, which acted the part of the glass-houses and fruit-walls of Northern Europe. After this natural protection had been gradually removed so as to let in the extremes of cold, this native of a mild climate was no longer able to resist the uncongenial influences to which it became exposed in more northern situations.

This theory I think strongly supported—if not demonstrated—by the fact that in the oldest parts of the United States the peach is now still found to thrive and bear luxuriant crops for 20, 30, and more years, in a section where the extreme cold of our winters is moderated through the influence of large bodies of water, as, for example, in the peninsula lying between the Delaware and Chesapeake Bays. In going south of Philadelphia, the extensive peach orchards, of many hundreds of acres to each proprietor, are not reached until we arrive at the line of the Delaware and Chesapeake Canal, from which point these great bays spread out.—Throughout the peninsula embraced between them the peach tree flourishes with very little care given to its cultivation.

On good mellow clay-loam alluvials, where the tulip poplar spreads its roots far and wide and attains a majestic height of 120 to 160 feet, with 8 and 9 feet in diameter, peach trees are found still healthy and in good bearing, more than 30 years

old, and 5 and 6 feet in circumference. In one old orchard of such trees planted originally 20 feet apart, many were blown down by a tornado. This left trees 40 feet apart, and in such cases the branches are now lapping. This indicates that no deterioration of the energies of the peach tree has taken place in the region referred to, where the loss of forest protection has been compensated by the ameliorating influences upon the climate exerted by adjacent large bodies of unfreezing water, often softened in temperature by currents from the South. From this comparatively limited region, the peach crop gathered the present season has been enormous, estimated by many at four millions of baskets of three pecks each.

By many the decline of the peach tree, so manifest in extensive regions of our country, has been attributed to a specific disease, the precise nature of which has not been explained in a manner to afford general satisfaction. It is commonly known under the vague designation of "the yellows," from the jaundiced tinge assumed by the foliage, and even bark, of the tree. I am inclined to regard this decline as the result of loss of vitality in the tree, owing to exposure to lower degrees of temperature than its original organization enabled it to withstand,—a kind of consumption, marasmus, or constitutional affection without any well-defined organic disease, the predisposing cause of which exists in climatic agency.

I think, also, that other fruits have suffered from similar agencies since the destruction of our forests and denudation of the country. That most delicate of all pears, the White Doyenne, could in former times be perfected almost everywhere. Now it can scarcely be found in a healthy condition outside of our cities, which, according to the theory I have advanced in regard to the peach, protect it from the low degrees of temperature persistently applied. There are other delicate varieties of this fruit and some apples, which doubtless suffer from similar influences: and the subject is one which will yet receive much attention from all interested in promoting fruit culture in our country.—*Practical Farmer.*

### Leached Wood Ashes.

"My opinion of soapers' ashes," says an English farmer, "is confined to the application of it as a top-dressing on pasture land. About twelve years ago, I agreed with a soap boiler for 1500 tons of soapers' ashes. I used to apply about twenty wagon loads per acre, and a single bushing would let the whole in. I was laughed at and abused for my folly; the wise ones alleging that my land would be burned up for years, and totally ruined; all which I disregarded, and applied my soapers' ashes every day in the year, reeking from the vat, without any mixture whatever. I tried six acres mixed up with earth; but I found it only doing things by halves. My land never burned; but from the time of the application became a dark green color, bordering upon black, and has given me more, but never less than two tons per acre ever since."



## The Garden.

### HORTICULTURAL.

To the Editors of the Maryland Farmer:

As your subscribers will be planting their gardens shortly after the receipt of your next number, I forward a few items which may assist them somewhat in their selection—as well as rejection—of varieties, of which we have so many new ones claiming the patronage of the public, and concerning which one short rule may be laid down: never forsake an old friend for a new face, until thoroughly tried.

Yours, very respectfully,

SUNDRIES.

**Parsnips.**—Student—A good variety; Cup—the best variety for this climate.

**Beets.**—Early Bassano—the best of the early beets; Long Blood Red—good; Dark Red Flat Egyptian—small; Dewar's Fine Red Blood—good; Henderson's Dwarf Pine Apple—very woody.

**Carrots.**—James' Scarlet, James' Intermediate—small and inferior to Improved Long Orange; Improved Long Orange—best of three varieties tested.

**Cabbages.**—Large Drum-Head—a late variety, good grower, sweet and well adapted to the climate.

**Onions.**—Rocca Giant Madeira—poor keeper; Rocca Pale Red Niort—poor grower; Early White Naples—good but small; Globe Tripoli—indifferent; Large Tripoli—poor keeper; Large Wethersfield appears to be the best onion for this climate.

**Mangel Wurzel.**—Carter's Champion Orange Globe—large, solid, and a thrifty grower.

**Turnips.**—Carter's Imperial Green Top Yellow Hybrid—good grower of medium quality; Carter's Imperial Purple Top Yellow Hybrid—best, a large sweet turnip; Carter's Imperial Hardy Swede—very small, too much top.

**Peas.**—Carter's First Crop—earliest; a good pea, fine flavor and productive; Carter's First Best—2d early; planted April 13, bloomed May 19; ready to eat June 10; a fine pea; Daniel O'Rourke—not early, but prolific and of first quality; McLean's Little Gem—planted April 14, fit to eat June 13, 10 inches high, a good pea, but a poor bearer; Champion of England—ripens late, but is unsurpassed in productiveness and quality, heavy grower, 5 feet; Veitch's Perfection—results do not correspond with name; Laxton's Prolific Long Pod—did not do well; Dunnet's Early, McLean's Epicurean, Peabody—did not do well.

**Sugar Corn.**—Excelsior—very productive and of fine quality.

**Sweet Corn.**—Stowell's Evergreen—large, early, productive, and of good quality.

**Beans.**—Early Yellow—Earliest, productive; Early China—good, very prolific; Fejee—best for

early eating; White Kidney—late, but the best bean, productive, late, adapted to climate.

**Tomatoes.**—Keye's Early—cannot recommend this variety.

**Saxonian Barley.**—Grain ripened, straw 25 or 30 inches high, which is too low for successful cultivation.

**Potatoes.**—Early Rose were tried beside Early Goodrich; Early Rose two weeks earlier, and a good keeper, fine eating potato; this variety is warmly recommended.

#### Another Series of Experiments.

**Carrots.**—Of three varieties, James' Intermediate, Long Surrey and Large Orange Belgian, the latter proved superior in quality and productiveness.

**Beets.**—Dewar's Fine Dark is good, and Dark Red Flat Egyptian more productive but woody.

**Peas.**—Carter's First Crop, earliest; a good pea, very prolific. I cannot let the above variety pass without specially commending it; every good garden should have it. Carter's First Crop, four days later; good, somewhat better than First Best, and equally prolific; Daniel O'Rourke did not sustain its reputation this year; Champion of England, one of our best peas, a tall grower, 5 feet. The above long established variety should be in every garden. If only two varieties of peas are planted, I should select Carter's First Crop and Champion of England, late; Beck's Prize Taker, Excelsior Marrow—good peas, prolific, matured well, somewhat earlier than Champion.

**Tomatoes.**—Maupay's Superior is very inferior in our section.

**Brussels Sprouts.**—Carters—one of the most desirable vegetables of the garden.

**Hearting or Cabbaging Kale.**—A good grower.

**Large Winter Cabbage or Madeira Lettuce.**—A good variety.

**Radish.**—Carter's Selected Long Scarlet—fair, very early, ready to eat 30 days from planting; Woody Frame—later (a few days) than Long Scarlet, but better.

**Cabbage.**—Enfield Market—A good variety.

**Beans.**—Large White Lima—Prolific and excellent; Early Yellow—a bush bean, fine, early and prolific; Early China—red, very fine, prolific, cook dark, better as a "snap;" Fejee—later and better than the other varieties; Negro Long Pod French—black, cook dark, moderately prolific, excellent as a "snap;" Fulmer's Forcing French—very prolific, of fine quality, large and late; White Kidney—rich, late, a good keeper, that is it cooks better late than other varieties. If only two varieties are to be planted, take Early Yellow, early and White Kidney, late.

We have the following results reported from another source:

Carter's Champion Orange Glove Mangel Wurzel—excellent for cattle.

**Onions.**—Deptford—Not as good as the Large White and Large Red, our established varieties.



*Cabbages*.—McEwan's Early did not head well.

*Sugar Corn*.—Excelsior—very superior and early.

*Peas*—Champion of England—Earliest; McLean's Premier—2d early, best eating pea; Veitch's Perfection—3d early, a good variety. (There must be some mistake about this pea report.—Ed.)

*Tomatoes*.—Tilden—better, earlier, and more prolific than Maupay's.

*Beans*—Early Yellow—bush; very fine and early, better and earlier than the old varieties.

*Lettuce*.—Madeira—Dark and not so good as the common Oak Leaf.

*Celery*.—Sandringham Dwarf White—A good variety, but Turner's Incomparable Dwarf White is better and more productive.

### ONION CULTURE.

The *Rural New Yorker* gives the following reply to a "poor boy" who wants to do something for himself, and asks "what garden crop will pay the best? If onions, what kind is the best to raise for market? What soil is best adapted for it?"

"Onions are usually a profitable crop to raise, but occasionally the price is so low that one cannot realize enough to pay for the culture. But this is true in regard to all kinds of farm products, and a man or boy's only safety is in persistent effort. No matter what you undertake, stick to it, and in the end you will surely win. If you commence growing onions do it with the expectation of following it up—not merely trying a crop one season and if it does not prove profitable abandon its culture; for one year there may be a scarcity, and the next an abundance, the price varying accordingly. The man who always has a good crop of any standard article is the lucky one and makes money. A season of great abundance and low prices always discourages planters, and thousands will abandon the culture of any crops thus affected; but the wise man does not vacillate to suit the whims of the unwise. We know a man near this city who made a fortune in raising cabbages; he always planted a certain number of acres every season, never varying for twenty years, and of course he was sure to be on the lucky side when prices were high. Onions usually return a fair profit on the labor expended in their culture; and as they do not deteriorate, if grown in the same soil year after year, we would advise you to prepare the land in the best possible manner, with the expectation of growing a succession of crops instead of one or two. The land should be made rich and as thoroughly pulverized as possible before the seed are sown. During the winter collect all the hen, sheep, or other fine strong manure possible, and have it ready to spread over the surface in the spring.

#### SELECTING A SITE.

It is quite important that the land selected for onions should be quite level, at least not on a steep side hill or in a field that is full of small or large depressions and corresponding knolls. If the ground is very uneven, the seed, as well as small onions, are liable to be washed away during heavy rains. The land should also be free from small stones that would interfere with the seed drill or hand cultivator, if such implements are used.

#### PREPARATION OF SOIL.

As early in spring as the land will do to work, plow up the bed only moderately deep, and before harrowing apply all the enriching materials that

have been gathered for this purpose. Whatever the nature of fertilizers used, they should be fine, without coarse lumps, straw or weeds. After the application of manure, harrow the land thoroughly in order to break up lumps, and mix the manures with the soil.

#### VARIETIES.

About four pounds of seed will be required for an acre; but the variety cultivated may be varied to suit the market in which the crop is to be sold. The White or Silver-skinned variety commands the highest price, but does not yield as well as the Yellow Danvers or Wethersfield Red—both very popular sorts.

#### SOWING.

Use a drill for sowing if one can be had, as much better work will be done with it than is possible by hand. Sow the seeds in drills about fifteen inches apart, and after all are sown pass a light roller over the surface to make it smooth and more convenient for weeding when the plants come up.

#### AFTER CULTURE.

As soon as the plants make their appearance commence hoeing and do not allow the weeds to get a start of the onions. When the plants are large enough to pull conveniently, thin them out, leaving them two inches apart. If wood ashes or plaster are to be had cheaply, sow one or both broadcast over the bed; the quantity used may be varied from five to ten bushels per acre, according to cost. All that will be required from this time forward until the crop is ripe is merely to keep the weeds down and the surface of the soil from becoming hard and baked."

### BEAN CULTURE.

A correspondent in the *Country Gentleman* gives the following reply to an enquiry "for the best method of raising beans:—"

I have been most successful with the Navy bean; average yield, 20 bushels per acre; inverted sod, turned as shallow as possible, and planted in rows two feet apart—hills one foot apart, with four or five beans in a hill. If the sod has been pastured two or three years, no manure is needed. Too rich land is not good, as the beans run too much to vines, continuing to blossom after the first set pods have ripened. All pods set on the runners are liable to lie on the ground and become mildewed and worthless, damaging the entire crop. Keep them clean from weeds and foul matter of every nature, but never work in them when wet, as it causes a rust to settle on the leaves, greatly retarding the growth. As soon as the last set pods are a little turned, pull them, and stack them as follows: Drive a stake firmly into the ground, reaching up 6 feet, to receive the beans; lay brush around the stake, sufficient to keep them from the ground; then commence pulling and place the roots against the pole, going around and around, being very careful that no pods touch the ground. When near the top of the pole, draw in by spilling the roots past the pole, forming a stack like a stack of hay. Cap with straw or weeds, binding the sap firmly to the top of the pole. Let them remain until thoroughly dried; then thresh them out on a clean grass plat or stow them away in the barn. Always sow oats after beans; any crop will do well, but oats will do best.

## The Dairy.

### THE NEW YORK PRIZE BUTTER.

At the last New York State Fair, the first prize on butter was awarded to W. V. H. Vandresser, of Scoharie county. Subsequently these successful competitors furnished the American Institute Farmers' Club with their method of manufacture, one of which we reproduce as follows:

The milking is done in tin pails, and immediately strained in tin pans containing about six quarts each; the pans are set on a rack made of slats about eight inches apart. The temperature is kept from 55 to 60° by our thick walls, by the flow of cold water, and by the use of ice. The milk is allowed to stand 36 hours before skimming. Great care is taken to cream the milk before it is thick or lopped through.

Our milk room is a basement under a wing of the house, the walls seven feet high, the sides two feet above the ground; the end or entrance of the room is four feet above the surface, and three feet beneath; the opposite end joins the cellar under the main part of the house. The bottom is laid with cement three inches thick; the walls are three feet thick, laid with stoke and cement, and the surface inside plastered with cement, lathed and plastered overhead. There is a well of pure, cold water in the room, a cistern on the outside, with lead pipe conducting the water into the room for washing purposes.—Under the pipe is a sink for creaming the milk. At one end of the counter is a hopper or box for the skimmed milk, which is conveyed to the hog-pen through pump-logs under ground.

The churning is done by dash churns driven by endless chain horse power, two churns running at the same time; 50 to 60 pounds are made at one churning, which occupies about thirty minutes.—Great care is taken not to churn too long, as it injures the grain. The butter is taken from the churn with a ladle, and washed with cold well water until it is entirely free from milk. In hot weather ice water is used; then we cure with Ashton salt, at the rate of one ounce of salt to two pounds of butter. It is then left until the next morning, when it is again worked with a butter worker; care is taken not to work it too much, as it injures the grain.

It is packed in white oak pails, holding 52 or 53 pounds. A cloth is put over the top of the butter, and a thin laying of salt on the cloth. It is then put in the store-room, where it is kept until shipped.

Our milk-room is kept well ventilated with pure fresh air. It is impossible to make good butter in a close room; the animal heat should be removed

from the milk as soon as possible after straining. In summer the windows are open through the night and morning; in cold weather at mid-day, and the temperature kept up with fire. We churn three or four times a week, making an average of 200 pounds a week, during ten months of the year.

### IRISH POTATOES IN MIDDLE GEORGIA.

Mr. Henry Temple's great and simple mode of culture should be generally known. He plants on the red lands of Milledgeville, Georgia.

*First—Two crops a year;* the fall crop much the best, and keeps fresh and sound all winter, like Northern potatoes.

*Second—No rotation;* he plants the same ground for ten years.

*Third—The crop averages a pound to the square foot—sometimes double that.* The spring and fall crop together not less than one thousand bushels per acre.

*Fourth—His mode, the simplest of all published, viz:* (a) Manures broadcast, say a half inch coating, or more. (b) Then plows and cross-plows, deep, with a common "rooter." This keeps the manure on top of the ground—a main point.—(c) Plants very close; about one seed to every square foot—i. e., drops seeds about ten inches apart in a "rooter" furrow, and covers with the next furrow; and so on, dropping seed in every furrow, and covering about as deep as corn. (d) Lastly, covers the ground with pine straw, about three inches deep, or more. In the spring don't spread straw until the seed is well sprouted and coming up; for the earth is cold and wet then, and the seed needs warm sunshine. But in July, when you plant the fall crop, cover with straw immediately, so as to keep the ground cool and shaded.

*Fifth—July planting, for the fall crop, needs special care of the seed, or it will fail to sprout and come up—but a little care insures it.* All needed is, just dig potatoes enough three or four weeks beforehand of the spring crop—say early in June—and lay them away in a dark room, so that the eyes or buds may ripen. Then plant and cover with the "rooter," plow and pine straw in July, and your fall crop is sure—making very small weed, but very large potatoes.

*Sixth—Mr. Temple's culture is a great success; a simple truth in Georgia agriculture.*

WILLIAM MCKINLEY,  
President Farmers' Club of Baldwin Co., Geo.  
—Southern Farm and Home.

**Samples of Tobacco.**—Messrs. Belt & Sons exhibited to us some beautiful samples of tobacco grown in Virginia the first year, which sold for \$75 per 100 lbs. The color, texture, and feel of this tobacco equalled, if not surpassed, any we ever saw or felt, and we profess to be good judges of the article, being familiarly acquainted with it from sowing the seed to its final end—in smoke, or "old soldier." These samples were sown to prove the great value, for this crop, of "Gilham's Tobacco Fertilizer," which this firm advertises for sale in this issue of the *Maryland Farmer*.



## Grape Culture.

### NEW YORK STATE GRAPE FAIR.

#### DISCUSSIONS ON GRAPE-GROWING.

At the late grape fair of New York, the following discussion was had. The first question was—  
GRAFTING GRAPES.

Mr. Wagener said that after experimenting four years, he had advised and patented a method of grafting that insured success. Iona grafting on stronger stocks matured earlier. (We should say in this connection that Mr. Wheeler informed the writer the next morning that he had seen on Mr. Wagener's grounds the Iona growing on Isabella stocks, and they appeared nearer maturity than on their own.—Rep.)

Mr. Pottle, Naples, has too large a proportion of Isabellas and Catawbias, and wishes to change them. Can this best be done by grafting, or by pulling up the old roots and planting new in their places, or must he plant on new land?

T. M. Younglove, Pleasant Valley, argued that inasmuch as grafted apples had proved healthy for centuries, grafted grapes ought to be. He said that Dr. Spaulding's method is to cut into the sides of the stock, nearly to the centre, but to avoid splitting it. Nearly all that he grafted last spring succeeded, although some of the stocks were cut off for nearly a week, waiting for the grafts.

Mr. Ringueberg, Lockport, was opposed to grafting. Had grafted Delaware on Isabella; it made a rampant growth of spungy wood, and bore insipid fruit. Found that warts or excrescences formed at junction of scion and stock, preventing the return of sap to old roots which, in consequence, commenced dying. New roots formed at the base of scion, and grew too near the surface, so that they were exposed to freezing in winter, and drying in summer. Roots should be eight or ten inches below surface.

Judge Larrowe thought if Mr. Ringueberg's theory is true, we can never have healthy vines from grafting. The sap ascends through the wood, and returns between bark and wood. If excrescences form at base of scion, the vines cannot be healthy. Thinks it very desirable that we change to earlier varieties. There is an uncomfortable feeling when cold nights come on, and frosts threatened, by which they may lose thousands of dollars. He will try grafting every alternate vine in a row.

Mr. Babcock, Lockport, six or seven years ago grafted 150 Catawba to Delaware and Hartford, and they have grown good crops of fruit, of same flavor as those grown on their own stocks.

Mr. Wagener has Delaware, Iona and Eumelan on grafted stocks—grafting done June, 1870,—and he fines that they have formed a perfect union, and did not kill back last winter. Considers April and May best months to graft in.

Mr. Babcock and Mr. Pottle both dissented from the opinion that the stock influences the time of maturing.

Mr. Wheeler thought the objections of Mr. Ringueberg could be met by layering the graft the second year, thus causing the cion to root at the proper depth. (It seems to us that if the cion throws out roots too near the surface the difficulty could be met by earthing up until they were covered up the proper depth.—Rep.) Mr. Wheeler's prac-

tice is to cover the stock and first bud of graft with earth, and then mulch with sawdust. Other gentlemen testified to their success in grafting.

#### WHAT VARIETIES SHALL WE GRAFT?

Was the next question, and Weiter and Croton were mentioned, but it was objected that we know too little about them. Hartford was generally admitted to be profitable. Concord is too thin-skinned to ship well; Eumelan has too large seeds; Salem and Wilder good so far, but not sufficiently tested.

Mr. Babcock would graft Hartford largely; would plant Delaware, but it requires much labor in packing; commenced Rogers 4—good quality, hardy vine, packs and ships well; a little earlier than Concord. Salem earlier than Delaware, productive, healthy vine, good market variety.

Mr. Ferris advise Walter in suitable localities.

Mr. Wagener.—Walter as early as Delaware; good and healthy.

Mr. Pottle found it earlier this year than Delaware, but doubts healthiness of foliage; needs more experience.

Vice-President.—In Vine Valley foliage good; growth unsatisfactory.

Mr. Wagener.—Eumelan defective this year in clusters. The fruit he believes best of black grapes; very early, starts earliest in spring, exposing it to late frosts.

Mr. Wells fruited four vines; good clusters, healthy foliage.

Mr. Babcock.—Ives Seedling will become a profitable variety for market; good to handle; healthy foliage.

Mr. Knapp has Ives in Vine Valley; yielded well, and sold for nine cents a pound.

Mr. Baker, Va.—Ives one of the best for shipping; Delaware one of the best.

#### DO WE TRAIN TOO HIGH?

Was the next question discussed.

Mr. Clark.—No objection to high training, but to overcropping.

Mr. Pottle, Naples, thinks vines should have plenty of space; whether high or lateral makes but little difference. The amount of space required depends upon the vine and the soil. Finds warting results from crowding.

Mr. Underhill experiences more trouble from crowding than all other causes. Remedy—more space. Recommends setting twice as close as they are to remain, and after three or four crops removing every alternate vine.

Speaking of overcropping it was agreed that short-jointed vines, like Delaware, are more liable to overcrop than long-jointed sorts like Concord, and while they should be trimmed the same length, part of the shoots of the short-jointed kinds should be broken out.

#### BEST PACKAGES FOR SHIPPING.

Much difference of opinion and experiences was developed in regard to whether square or round packages, large or small ones, find the readiest sale in eastern cities. A New York dealer present explained that different customers require different packages. Market women prefer large packages to retail from. Fine stands prefer small, fancy three pound boxes. A large shallow box best for shipping Concord. A gentleman said Concord should be packed in the forenoon, allowed to stand in the sun until night, then stand two or three days in packing house, when it can be shipped as well as any other variety. Here this very interesting discussion closed.—*American Rural Home.*



## The Florist.

### FLORICULTURE---FOR APRIL.

PREPARED BY JOHN FEAST, Florist, Baltimore.

A late spring is indicated, which will retard planting, and therefore will require every exertion to have things ready in proper time, for planting out when the weather becomes favorable. Many plants in the houses will have done flowering, and might be cut down and set aside, such as are about to flower, which at this season will make a fine display, such as the *geraniums*, *azaleas*, *acacias*, *heaths*, *epacris*, *amyrtillus*, *francescas*, *generas*, *rogenias*, *coreas* and many others.

*Rhododendrons*—kept in pots or tubs, for early bloom, will now begin to flower with their various tints of every hue, rendering them one of the most showy plants in cultivation and cannot be to highly appreciated; they are of easy culture, requiring but little heat, sufficient to keep off the frost, though many varieties will stand the winter out of doors without protection, yet others of the fine hybrids are rather too tender and should be protected at a temperature from thirty-five to forty degrees, like *camellias*, which thrive best under this treatment, keeping in better health than when forced.

Many of the hot house plants should be attended to, as *marantas*, *caldiums*, *alocasia*, *gloxinias*, *tydea*, *plectopomas*, *gesneras* and many others, if not reported should be put in proper sized pots with soil composed of leaf, loam and peat, equal quantities, with a little mixture of sand; give good drainage and put in a warm place, and water moderately till they begin to grow.

*Cactuses* will now be coming forward, and some showing flower buds; they will require a little more water at this time; have them neatly tied up to rods or sticks, which ought to be done before the buds expand.

*Cinerarias* and *Calceolarias* must be kept clean and put in sized pots for flowering; watering with a little guano water will much improve them in flowering.

*Dahlias* that have sprouted should be increased from the cuttings or by dividing the roots, and put in pots till time for planting out.

*Verbenas* and all *Budding Plants* should be ready for putting out in the open ground; keep them as hardy as possible by giving plenty of air.

*Herbaceous Plants* may be divided, and reset in the borders, and seed may be sown, of such as are wanted, in boxes or the open ground, and when large enough, plant out in the open ground.

### FLORAL VASES.

There is nothing more strikingly beautiful and attractive to the eye than the brilliant beauty of the products of the garden or conservatory; and we wonder how any person of taste, who possesses the means, should ever fail to ornament and beautify his home with plants and flowers. Of late years, the taste for hanging baskets made of wire-work, earthenware, or of rough and gnarled roots to form "rustic" work, has become so general that the manufacture of baskets, flower-pots, epergnes, and vases has been necessarily increased. Besides many excellent devices of American design and manufacture, there are imported every year from Europe a great number of parlor ornaments; many of them of the most costly description, and suitable only for the mansions of the wealthy. The hanging wire and rustic baskets, however, may often be seen in less pretentious homes, bespeaking for the inmates good taste and a love for the beautiful in nature. But only certain kinds of plants are suitable



PARLOR VASE.

ble for hanging baskets,—such as are of low compact growth, to cover the surface; and such as are of drooping or trailing habit, to hang over the sides. We now give our readers an engraving of a parlor vase as manufactured by W. S. Carr & Co., 110 Centre Street, New York. It is made of cast iron neatly bronzed over, and is constructed so as to combine vase and pedestal in one piece. The pot containing the earth and flowers is placed within the vase; the pedestal of which is not hollow throughout, but at the centre has a stop or plate, so that the water, after percolating through the earth and dropping from the flower-pot, is prevented from going further than the centre of the pedestal. The water is drawn off at pleasure by means of a small faucet, concealed behind a rose, which is operated by a detachable key to prevent children from opening it.

Every summer we notice that there is considerable taste displayed, not only in the decoration of parlor windows, but also in the small patches of garden in front of many city dwellings. Cast-iron or earthen vases filled with flowers and creeping vines seldom look out of place, and must be pleasing both to pedestrians and to those who place them there. Let the coming summer be marked by a more general display of these things, which are so pleasing to both rich and poor. They are not expensive luxuries, but come within the reach of most persons.

The above we copy from the *Industrial Monthly*, and in subsequent numbers will introduce a series of illustrations of Floral Fountains, Parlor Vases, Conservatory Fountains, &c., &c.



## Ladies Department.

### HOW SHE BECAME A PRIMA DONNA.

Paul Smith was a poor old man. He had a back room in the top of a noisy lodging house, where he slept nights, and munched his meals of bread and cheese (or Bologna sausage when he could afford it,) and from whence he crept as harmless and unnoticed as a fly, down the corner of the dingy street, to the little music shop of Carl Bertmann, a German settler somewhere in Soho.

There he tinkered all day on broken violins and other musical instruments, never absenting himself for a moment, save on Saturday afternoons, when he went to the house of a small tradesman to teach the piano to three or four very stupid girls. Sundays he curled up in his den, and amused himself, nobody knew how, until Monday morning.

There are a few certainties; he never went to church; but he picked ragged children from the pavement when they fell near him, and gave them halfpennies when he had any; shared his dinner often with a mangy, dirty cur, who acted as a sort of escape-valve for the ill-temper of half the men and women in the street; and he roused Pat Ryan from his mid-night snooze in the gutter many a cold night, and literally carried him home to Norah and the children.

As for his honesty, a neighbor remarked, "If he found five shillings in the street, he'd wear out ten shillings worth of strength and shoe leather to find the owner."

One cold night Paul was returning from his work, with a loaf of bread under one arm and a violin under the other, when at the street door he stumbled and nearly fell over a small object crouched on the step.

"Bless us! What's this?" cried Paul, striving to regain his equilibrium.

"Only me, sir!" And the small object stood up, and became a very pale, thin, and ragged child.

"Are you hurt, little girl?"

"No, sir."

"What are you doing out here in the cold?"

"Nothing."

"Why don't you go home?"

"I ain't got any."

"Dear me! Where's your mother?"

"In heaven!"

At this Paul was dumfounded; and, seeing that great tears were stealing down the child's wan face, he thrust the violin under the arm which held the bread, and putting the other around the tiny figure, he said:

"Oh! I've got a home—a real jolly place! Come up and see."

And this is the way old Paul came to have a neat little housekeeper, and to be buying gowns and shoes out of his poor salary.

The winter of 186— came in like a lion, as many a poor wretch well remembers, and with the first blast came Paul's enemy. He turned one night a sad face from his warm corner in Bertmann's shop among the violins, and hobbled up the cold street, feeling the approach of the old rheumatic pains, and wondering what would become of his poor little Camilla.

His excitement carried him up to the last flight of stairs, and hearing Camilla's voice, he paused to rest and listen. She was singing in that sweet and expressive manner which made her voice seem to him the sweetest and purest he had ever heard. At the end of the stanza, she took breath, and another voice said, "Child, you astonish me. Either I am a poor judge of music, or else your voice is the finest I ever heard. You are right in preferring it to anything else."

An electric thrill shot through old Paul's frame, and quickened his blood to rapidity that quite carried away his rheumatic pains, and in a twinkling he was up the stairs and in his little attic.

He was terrified at the sound of a man's voice, but the sight of a handsome and polished gentleman, with diamond studs in his snowy linen, a heavy ring upon his dainty white hand, unquestionable broadcloth upon his back, in close conversation with his Camilla, whose wondrous beauty had of late startled even his dull perception, was more than Paul could bear.

He was a very small man—had been in his youth—and now that Time's withering fingers had touched him he was shriveled and dried like withered fruit, but in his virtuous indignation he puffed out to his fullest extent, and in his falsetto voice piped:

"Camilla, how dare you invite anyone here?"

"Oh, Uncle Paul! This is Mr. Clavering, a gentleman whose—whose—"

"Whose mother she saved from death. Your niece, sir, a

few days since, was passing through our crowded thoroughfare, when my mother's carriage drew up to the pavement. The horses were restive, and bidding the driver attend to them, she began to descend unassisted. Her foot was on the step, when the animals sprang and flung her violently from her foothold. But for the sudden act of your niece, who received my mother in her strong young arms, the fall might have proved a fatal one. My mother at once entered a shop, and keeping your niece near her, sent for me. I came today, at my mother's earnest request, to express our heartfelt gratitude, and to offer—"

"You needn't offer Camilla a penny, sir. She will never suffer while I've a pair of hands to work for her," said Paul.

"You mistake me. I do not wish to insult you, but would raise this child from her poverty and educate her, that she might be of use to you and to herself, and become a refined woman. Don't let your selfish love stand in her light, and shut it out from her. She sings like a prima donna, and wishes to study music."

The great lustrous eyes of the child turned imploringly to her guardian.

"Lor', Camilla, I can't stand in your way. I know you're every bit a born lady, if your poor forsaken mother did die in a hovel, among wretches who turned her child into the cold as soon as the breath had left her body; but deary me I can't part with you."

"And you shall not. Let me serve little Camilla, and she shall never leave you, but prove a blessing to you in your old age."

Paul could say nothing, and the strange visitor departed, with no further injury to his darling than an eloquent glance from an expressive pair of eyes.

Day after day, Camilla went with her books to the teacher so strangely provided; and after a little time there came days when passers paused to listen to the warbling of the rich young voice.

When she had been there six months she entered one morning to find Mrs. Clavering in the music master's room.

"What do you intend to do with your famous pupil?" said her soft voice.

"Madame, Camilla is capable of doing anything in a musical way. She will be a songstress of whom this country will be proud. Ah, here she is!"

"You have improved wonderfully, my child," said the lady, holding out her gloved hand. "I came to bring you Richard's farewell. He leaves for London to-night, and will remain abroad for many years. Here is a little gift, as a token of remembrance."

She did not understand that Mrs. Clavering had placed a pretty necklace of coral in her hand, and then gathered up her shawl and departed; but when her teacher spoke, she cried out as if in mortal pain, and, without a word, flew down the street toward home. As she turned the corner, she rushed pell-mell into the arms of a gentleman, who, on seeing her pale and tearful, said:

"Why, little Camilla, what is the matter?"

"Oh, Mr. Clavering, you are going away!"

Richard Clavering's fine face grew sad and expressive as the tearful eyes looked into his own, and for the first time he comprehended that he was a young man, and that his protegee was stealing from childhood into beautiful girlhood, and was undeniably a beauty.

"Camilla, I am going away, but will you wait for my return?"

"Wait for you? I am not going to run away."

"You do not comprehend me. Well, it is better so. Perhaps two years later you may understand me. Good-by, Camilla. Kiss me good-by."

It was a very quiet street, so Camilla lifted her head and kissed him. In all probability the child would have kissed him in the main thoroughfare as readily as there, and I only mention the fact of the street being a quiet one to silence the startled propriety of those who are shocked at the publicity of it.

Well, there they parted. He to go over the sea, she to remain at home and improve the opportunities he had placed before her.

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The great heart of the music loving public was agitated with mingled emotions of joy, pride, astonishment and awe. A new songstress had been criticised, picked over piecemeal, ground down to the finest point, dissected, examined through the most perfect musical microscope, and pronounced perfect! And now the manager of a first-class, fashion-patronized theatre had engaged her for a single night at an almost fabulous sum, and the world was to hear her voice.

The night came. The theatre was crowded from pit to roof. The orchestra pealed forth a grand overture, the expectant crowd filled the air with perfume, and soft murmurs of whispering voices and rustling silks arose in a subdued